

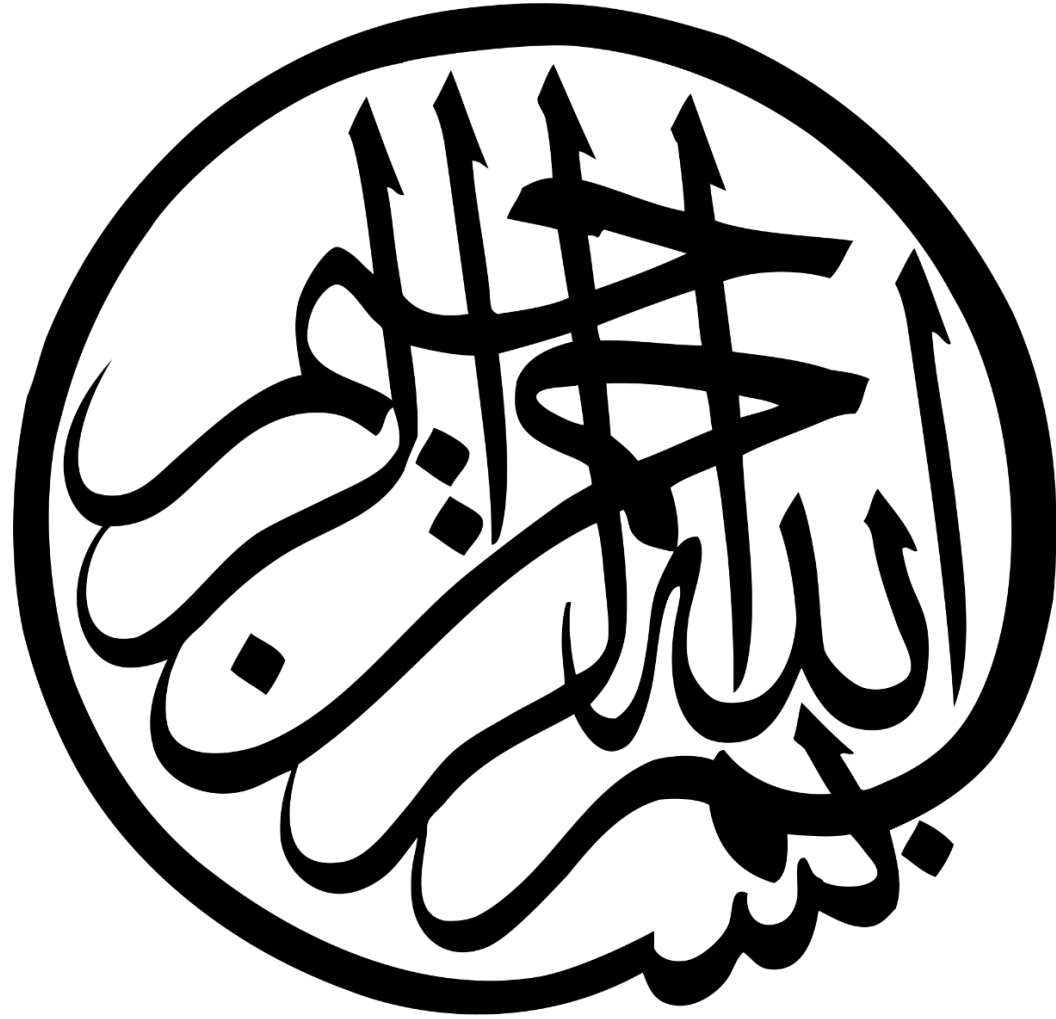


Rawalpindi Medical University

Integrated Modular Curriculum – 4th year MBBS



(REVISED)- October 2023



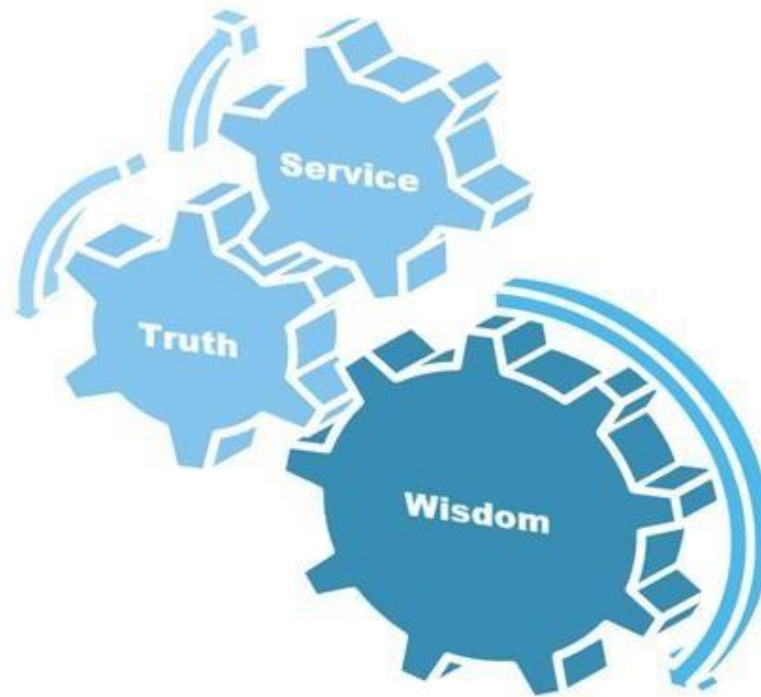
**Dedicated
To
Our Beloved Holy Prophet (PBUH)**

Mission Statement of RMU

- To impart evidence based research oriented medical education
- To provide best possible patient care
- To inculcate the values of mutual respect and ethical practice of medicine

Vision and Values:

- Highly recognized and accredited center of excellence in Medical Education, using evidence-based training techniques for development of highly competent health professionals.



Word by Vice Chancellor

There is no subject which will require more careful consideration in the settlement of the educational details of the University of which RMU is to be the centre than that of the choice and arrangement of the curriculum to be required for the degree in medicine. An exceptional opportunity presents itself, you have, within certain limits, a tabula rasa, and it behoves the authorities of the future university to mark it in the manner best calculated to promote the advance of medical science and the efficiency of medical teaching. If, from an experience acquired as a teacher and examiner in various universities during a period of more than a quarter of a century, I can help in the promotion of these objects, by pointing out virtues which may be emulated here, and failings which may be avoided there. I shall at least feel I have done something to assist in the modelling of what will, we all hope, become one of the great centers of learning of Pakistan.

But whilst endeavoring to sketch out what subjects should form part of the medical curriculum of a university, and to appraise their relative order and value, I do not propose to place before you an ideal which is unattainable under the circumstances of place and time, in which you find yourselves, although it would be easier to construct an ideal curriculum than to plan one out within the limits of present-day practicability. I suppose that the integrated modular curricula now being established in our university will more nearly approach the ideal.

The diverse faculty and student body make our programs earn top national and international reputation. I can say with complete confidence that what makes our university exceptional are the faculty & staff who are dedicated to help our aspiring students to become the compassionate, highly skilled health-care providers of tomorrow.

The breadth and depth of our robust academic experience, which is rooted in the basic and clinical sciences, is tied to hands-on learning, in our wards; through diverse clinical experiences; and through dynamic academic research with our distinguished scholars, skilled master clinicians and physician faculty. Here, you will learn the “science” of your discipline and the evidence that substantiates the service-delivery approaches for your patients. We strive to develop caring clinicians and healthcare leaders who possess the knowledge and skills to deliver the most efficacious clinical and administrative services — the “art” of their profession.

Professor Dr. Muhammad Umar
Founder Vice Chancellor RMU



Word by Additional & Assistant Director DME

Integration seeks to break down the barriers between the subject areas in order to provide students with better learning opportunities that facilitate the development of knowledge that is relevant and meaningful to clinical practice, deep and retrievable, and amenable to alteration, updating, and development as a part of an ongoing process of lifelong learning.

Curriculum integration is an approach to teaching and learning that is based on both philosophy and practicality. It can generally be defined as a curriculum approach that purposefully draws together knowledge, skills, attitudes and values from within or across subject areas to develop a more powerful understanding of key ideas. Curriculum integration occurs when components of the curriculum are connected and related in meaningful ways by both the students and teachers.

Integrating a curriculum is a complex process. Our faculty untiringly contributed towards making of this curriculum. We can proudly say that we are the Pioneers of this integrated modular curriculum in Public Sector in Punjab. This integrated curriculum of ours holds much promise for raising students, who will be able to apply their knowledge to their work and to their personal development.

Our faculty tries to develop in students, medical residents and fellows an awareness, through integration of subjects, their responsibility to contribute to an environment of loving care, sensitivity and respect for human dignity as they comfort people whose lives have been disrupted by illness or injury.

As a student of our university, you'll learn from distinguished, interdisciplinary faculty who provide a unique blend of experiential, clinical and academic preparation. We focus on the quality of care and the uniqueness of each patient, and the complexity of the healthcare environment. You'll gain an appreciation from your peers in other health professions as well, as you learn about the role of teaming in healthcare delivery. We foster critical thinking skills and strive to teach you how to provide a well-thought out and researched analysis of assessment and treatment methods. Through this dynamic interplay, you'll learn how caring and compassionate leaders can use their skills to make their communities — and the world — a better place.



Dr Asma Khan
Add. Director DME
Implementation In charge 3rd Year
MBBS



Dr Omaira Asif
Ass. Director DME/ Author

Preamble

Curriculum of a subject is said to be the throbbing pulse of a nation. By looking at the curriculum of a subject, one can judge the state of intellectual development and the state of progress of a nation. The world has turned into a global village, new ideas and information are pouring in a constant stream. It is, therefore, imperative to update our curricula by introducing the recent developments in the relevant fields of knowledge.

Medical science is constantly advancing with the advancement of science and technology. Global changes are happening in medical education in accordance and conformity of these advancements and changes. With the application of these knowledge and skills of medical science, future doctors should satisfy their patients with the changing needs of the community. Much changes are happening in teaching methods and teaching sites or learning environment. It is now an established fact that best learning is achieved through utilizing the learning environment in factual situation. A doctor can better learn from his own patients. Slogan of today is now the unity of education and practice. The undergraduate curriculum for future doctor is expected to be so designed that it should focus more on real life situation and of learning i.e. more community oriented as well as more community based. To serve this purpose community campus partnership is very much appropriate and essential

"Knowledge Learnt in Isolation is Rapidly Forgotten"

Here comes the importance of integration. Integration is de-fined as organization of teaching matter to interrelate or unify subjects frequently taught in separate academic courses or departments.¹

In another definition, the term integration in education means coordination in the teaching learning activities to ensure harmonious functioning of the educational processes.

Integration in modern medical curricula means abandoning the traditional discipline based discreet segmentation and isolation of teaching and learning activities within "concrete" silos. Integration seeks to break down the barriers that is relevant and meaningful to clinical practice, is deep and retrievable and which is amenable to alteration, updating and development as a part of an ongoing process of lifelong learning.

It is expected from the students to:

To impart evidence based research oriented medical education

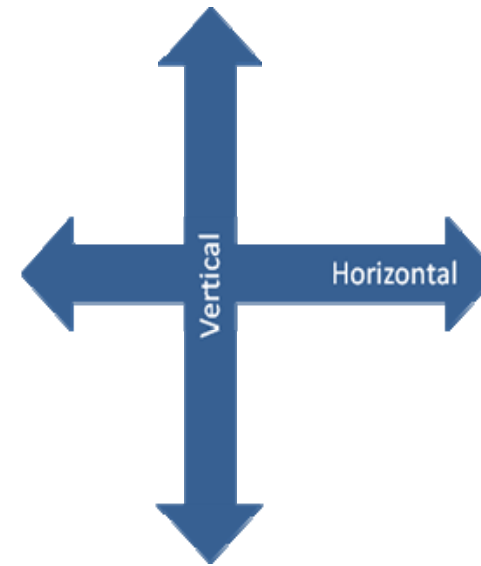
To provide best possible patient care

To inculcate the values of mutual respect and ethical practice of medicine

Vertical: bringing together basic and clinical science

- *Early clinical experience*
- *Clinician-scientist partnerships*
- *On-going incorporation of science in later years*

Horizontal: bring together the disciplines, topics, subjects



Medical education has traditionally been compartmentalized into basic and clinical sciences, with the latter being viewed as the skillful application of the former. Over time, the relevance of basic sciences has become defined by their role in supporting clinical problem solving rather than being, of themselves, a defining knowledge base of physicians.

Why do we need integration?

Integration is needed to avoid the information overload that is associated with the traditional curriculum where learning was delivered as a series of discipline blocks over concerned with detail and with little recognition of the links between subject and topic areas that are required to make the knowledge created available for use and application in new situations. Integration deals more with principles and concepts which can be used to explore and understand novel problems and allow new solution to be achieved. Furthermore changes to the clinical environment, the expectation of patients, the accountability to stakeholders and the understanding of learning and its theoretical basis demand new, effective approaches to the learning and the preparation of learners in order to be fit for purpose.

What is curriculum

According to definition curriculum can be classified into five categories:

1. Curriculum as a product - program, document, electronic media, or multimedia
2. Curriculum as a program of study - usually courses offered, curriculum sequences of study in standards as benchmarks, gateways,
3. Curriculum as intended learnings - goals, content, concepts, generalizations, outcomes
4. Curriculum as experiences of the learner - activities, planned and unplanned.
5. Hidden curriculum - what students learn that isn't planned - unless you plan for this - or is it possible?

Integrated Medical Curriculum

Shoemaker defines an integrated curriculum as “education that is organized in such a way that it cuts across subject matter lines, bringing together various aspects of the curriculum into meaningful association to focus upon broad areas of study.” There is an ongoing discussion about whether medical curriculum should be discipline based or integrated.

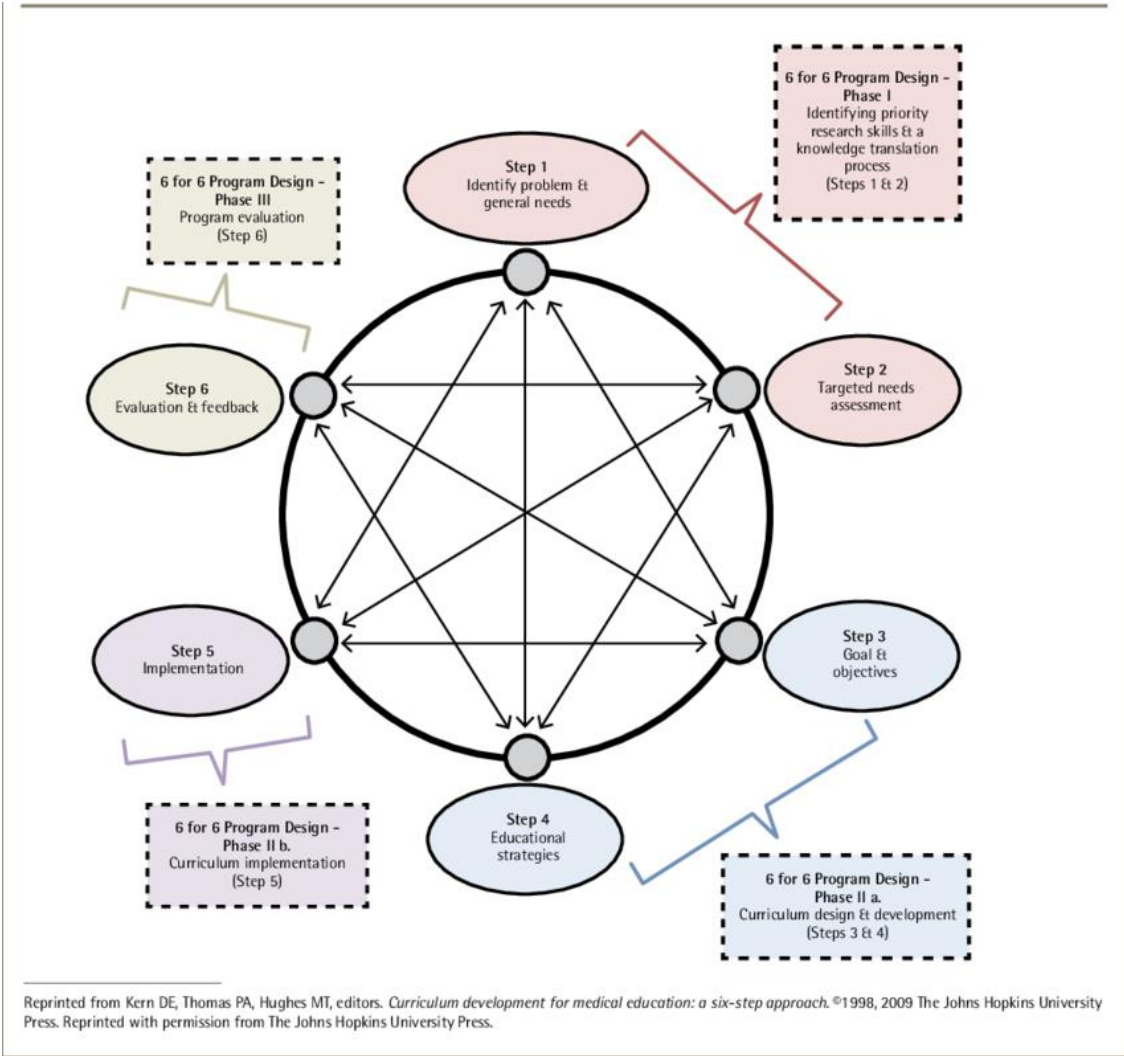
Most curricula for medical education have been integrated horizontally and vertically--vertically between basic and clinical sciences. The Flexnerian curriculum has disappeared to permit integration between basic sciences and clinical sciences, which are taught throughout the curriculum. We have proposed a different form of integration where the horizontal axis represents the defined learning outcomes and the vertical axis represents the teaching of the sciences throughout the courses. We believe that a mere integration of basic and clinical sciences is not enough because it is necessary to emphasize the importance of humanism as well as health population sciences in medicine. It is necessary to integrate basic and clinical sciences, humanism, and health population in the vertical axis, not only in the early years but also throughout the curriculum, presupposing the use of active teaching methods based on problems or cases in small groups.

The method of teaching medicine, since Flexner's days, implies that students should first learn basic and biomedical sciences and then move to clinical sciences; however, this is not how patients are presented. A common criticism of this approach is that students will not see the relevance of basic and biomedical sciences applied to clinical practice, and it is preferable to encourage students to think as doctors from the day they enter medical school.

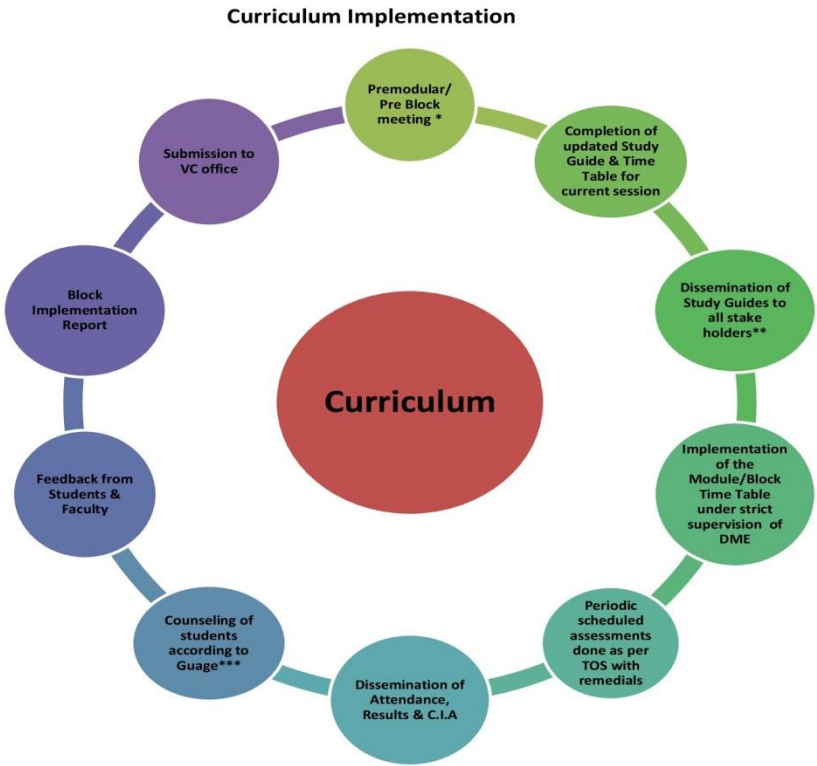
Integration is therefore of key importance for medical education because basic science learning is placed in the context of clinical and professional practice and is considered by students to be more meaningful and relevant. In the vast majority of curriculum reforms, vertical integration combines basic and clinical sciences, early clinical experience, clinician–scientist partnerships, and incorporation of sciences in the later years of the course. This is undoubtedly an advantage, but is based on a biologist's vision of the health-illness process.

Curriculum Development & Implementation

The process of curriculum development is adopted from Kern’s Curriculum Development process. Our concept and process of curriculum implementation is grounded under following process:



Curriculum Development



• With dissemination of previous session's teaching activities

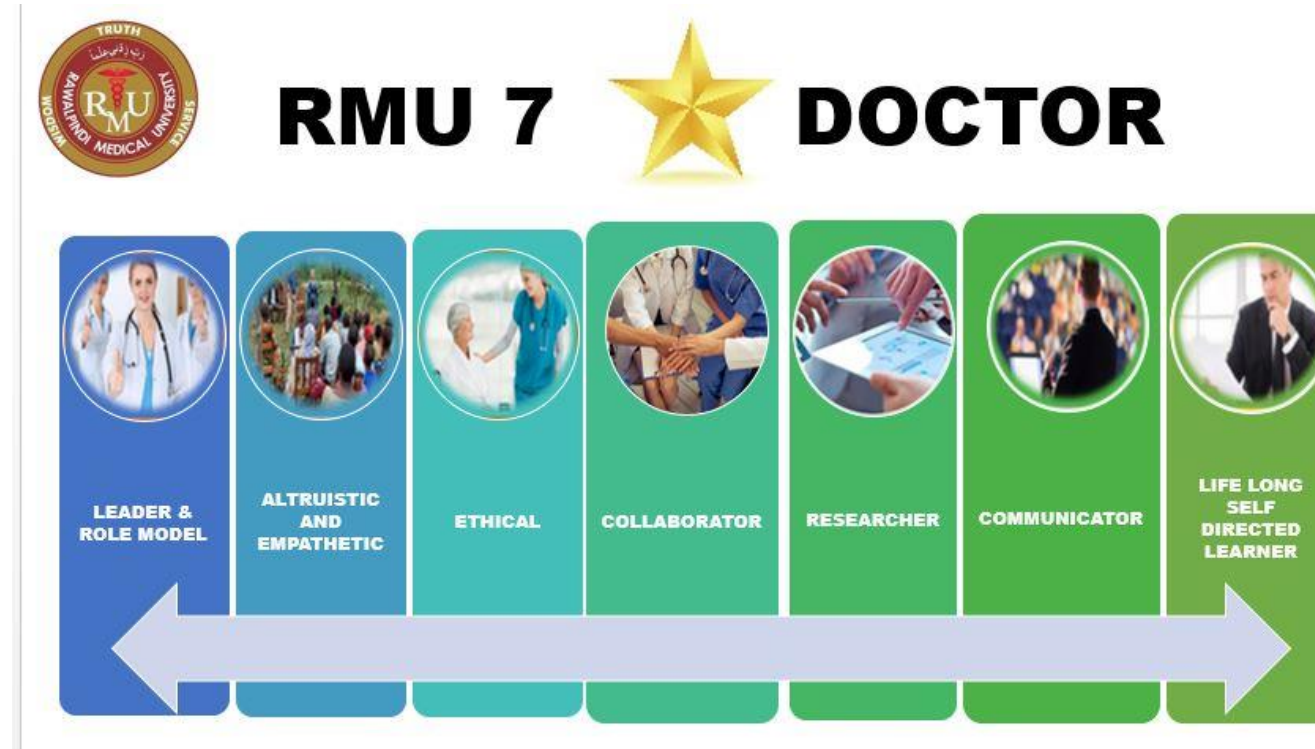
** Faculty, Students & Support Staff

Zone (Gauge for Attendance)	
Extra Ordinary	90-100%
Blue Zone	80-89%
Purple Zone	70-79%
Yellow Zone	60-69%
Orange Zone	50-59%
High Alert	26-49%
Red Zone	15-25%

Curriculum Implementation

7 Star Doctor

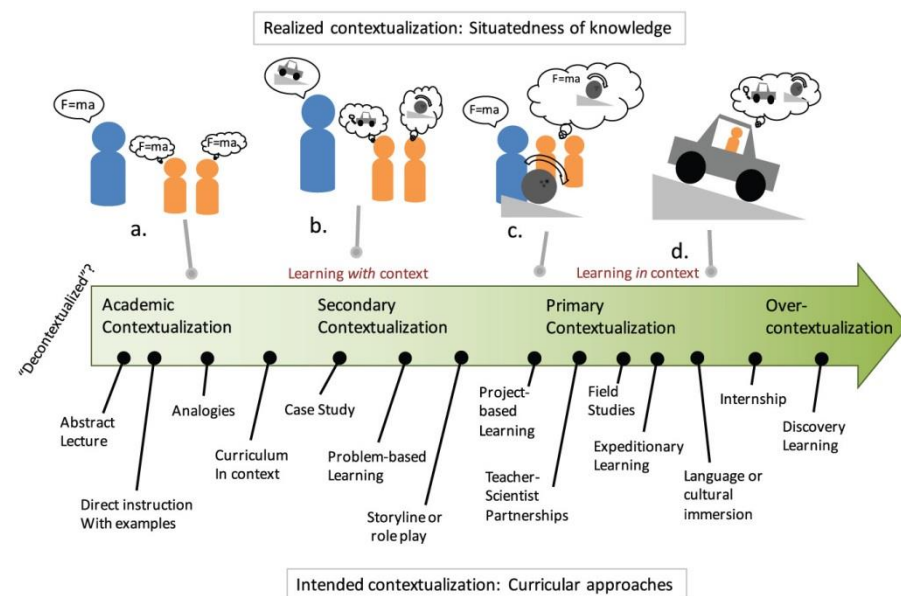
At RMU we aim to produce seven-star doctor having the generic competencies of “**Skill, Knowledge, Community Health Promoter, Critical Thinker, Professional, Scholar, Leader and Role Model**”, Rawalpindi Medical University has introduced modular integrated undergraduate curriculum as being first public sector university. These competencies are further outlined by various enabling traits specifying knowledge, skills, and attitude.



Contextualization

Contextualization in the curriculum refers to the process of integrating the local needs and global standards into the curriculum. It ensures that the curriculum is relevant to the needs of the local community, while also meeting the global standards. In the context of health professionals, contextualization is essential as it helps students to be better prepared for the real world, where they will be providing healthcare services to diverse populations. Content identification, contextualization, and validation at the time of curriculum development requires consideration of the local needs and global standards simultaneously, by the relevant leaders and experts.

At Rawalpindi Medical University we have a vision for conforming to any global health standards and is ever evolving for any newer innovative methodologies.



Teaching Strategies:

Case Based Learning

Case-based learning (CBL) is an established approach used across disciplines where students apply their knowledge to real-world scenarios, promoting higher levels of cognition. In CBL classrooms, students typically work in groups on case studies, stories involving one or more characters and/or scenarios. The cases present a disciplinary problem or problems for which students devise solutions under the guidance of the instructor. CBL has a strong history of successful implementation in medical, law, and business schools, and is increasingly used within undergraduate education, particularly within pre-professional majors and the sciences (Herreid, 1994). This method involves guided inquiry and is grounded in constructivism whereby students form new meanings by interacting with their knowledge and the environment (Lee, 2012).

There are a number of benefits to using CBL in the classroom. In a review of the literature, Williams (2005) describes how CBL: utilizes collaborative learning, facilitates the integration of learning, develops students' intrinsic and extrinsic motivation to learn, encourages learner self-reflection and critical reflection, allows for scientific inquiry, integrates knowledge and practice, and supports the development of a variety of learning skills.

CBL has several defining characteristics, including versatility, storytelling power, and efficient self-guided learning. In a systematic analysis of 104 articles in health professions education, CBL was found to be utilized in courses with less than 50 to over 1000 students (Thistlethwaite et al., 2012). In these classrooms, group sizes ranged from 1 to 30, with most consisting of 2 to 15 students. Instructors varied in the proportion of time they implemented CBL in the classroom, ranging from one case spanning two hours of classroom time, to year-long case-based courses. These findings demonstrate that instructors use CBL in a variety of ways in their classrooms.

Small Group Discussion:

Small-group teaching and learning has achieved an admirable position in medical education and has become more popular as a means of encouraging the students in their studies and enhance the process of deep learning. The main characteristics of small group teaching are active involvement of the learners in entire learning cycle and well defined task orientation with achievable specific aims and objectives in a given time period. The essential components in the development of an ideal small group teaching and learning sessions are preliminary considerations at departmental and institutional level including educational strategies, group composition, physical environment, existing resources, diagnosis of the needs, formulation of the objectives and suitable teaching outline. Small group teaching increases the student interest, teamwork ability, retention of knowledge and skills, enhance transfer of concepts to innovative issues, and improve the self-directed learning. It develops self-motivation, investigating the issues, allows the student to test their thinking and higher-order activities. It also facilitates an adult style of learning, acceptance of personal responsibility for own progress. Moreover, it enhances student-faculty and peer-peer interaction, improves communication skills and provides opportunity to share the responsibility and clarify the points of bafflement.

Curriculum Committee

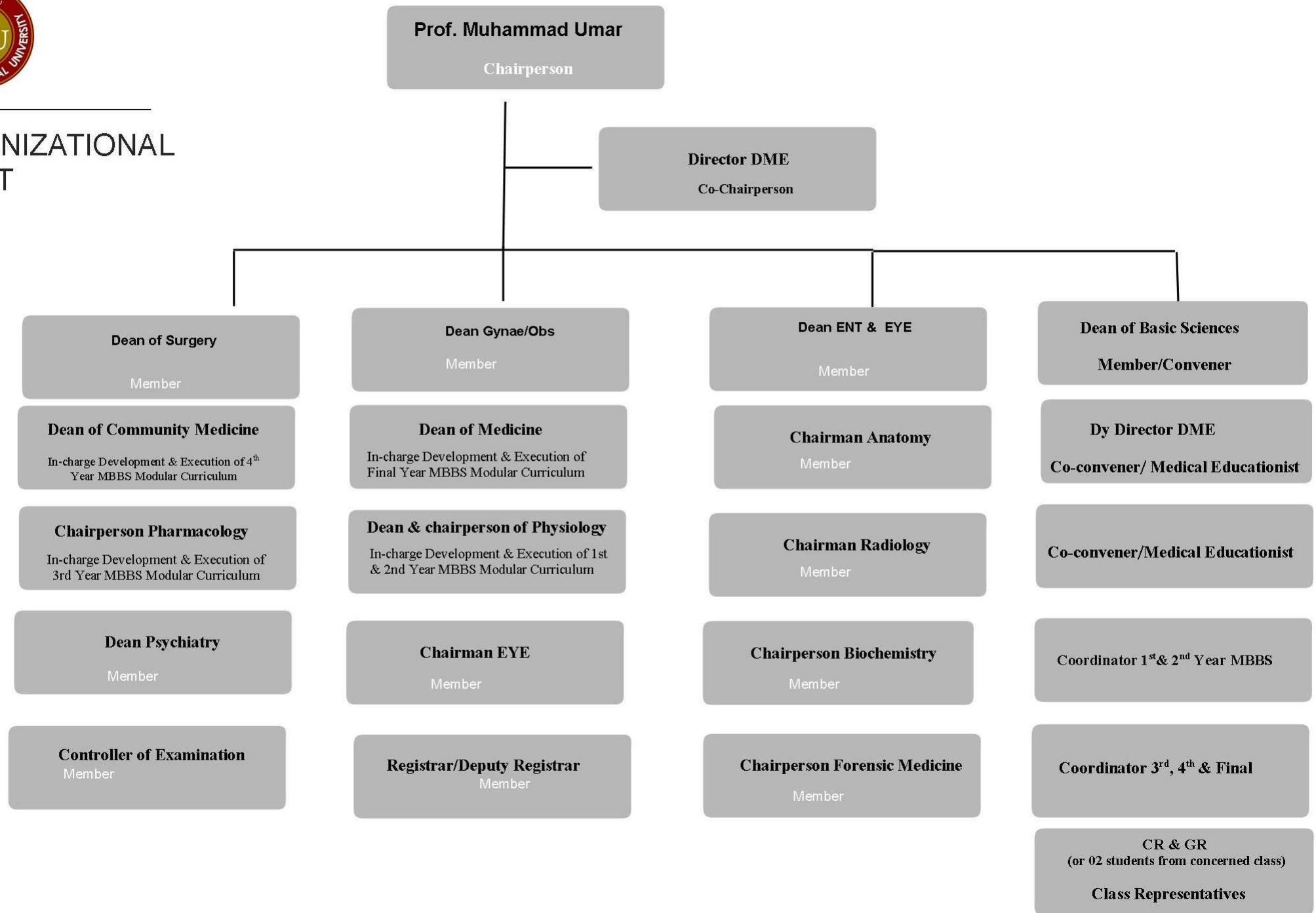
Members of Curriculum Committee

1. Prof. Muhammad Umar Vice Chancellor	Chairperson
2. Prof. Muhammad Rai Asghar Chairman Pediatrics Director Department of Medical Education	Co-Chairperson
3. Prof. Idrees Anwar Dean of Surgery & Allied	Member
4. Prof. Lubna Ejaz Professor of Gynae-Obstetrics	Member
5. Prof. Naeem Akhtar Prof of Pathology	Member/Convener
6. Associate Prof. Dr Asma Khan Head of Pharmacology	Member In-charge Development & Execution of 3 rd Year MBBS Modular Curriculum
7. Prof. Syed Arshad Sabir Dean of Community Medicine & Public Health	Member In-charge Development & Execution of 4 th Year MBBS Modular Curriculum
8. Prof. Muhammad Khurram Dean of Medicine & Allied	Member In-charge Development & Execution of Final Year MBBS Modular Curriculum
9. Prof. Samia Sarwar Head of Physiology Department	Member Dean Allied Health Sciences
10. Prof. Asad Tameezudin Head, Institute of Psychiatry	Member

11. Prof. Fuad Niazi Professor of Ophthalmology	Member
12. Prof. Tehzeeb-ul-Hassan Head of Anatomy Department / Dean of Basic Sciences	Member
13. Dr. Tehmina Qamar Associate Professor Head of Biochemistry Department	Implementation incharge 1st & 2nd year MBBS
14. Controller of Examination	Member
15. Registrar/Deputy Registrar	Member
16. Dr. Shazia Zeb Deputy Director DME	Co-convener
17. Dr. Arsalan Manzoor Assistant Professor of Anatomy	Co-convener
18. Dr. Sidra Hameed Assistant Prof. Physiology/ Assistant Director DME	Coordinator 1st& 2nd year MBBS
19. Dr. Omaira Asif Assistant Director DME	Coordinator 3rd, 4th & Final Year MBBS
20. CR & GR (or 02 students from concerned class)	Class Representatives



ORGANIZATIONAL CHART



Terms of Reference for Curriculum Committee Integrated Modular Curriculum

1. The curriculum committee should comprise of the following members
 - a. Dean of faculty (chairperson)
 - b. All heads of department
 - c. Module coordinator/s (of the module to be discussed)
 - d. Representative from Medical Education Department
 - e. Representative from Examination Department
 - f. CR and GR as student representatives
2. Responsibilities of the curriculum committee
 - a. Planning, implementation and evaluation of the curriculum
 - b. Evaluation of innovations in the curriculum
 - c. Development and modification of the curriculum document
 - d. Development and modification of the study guides
 - e. Development of yearly planner
 - f. Review faculty feedback and student feedback of modules
 - g. Review faculty feedback and student feedback of examinations
 - h. Propose recommendations and ensure
3. Meeting should be held after every 6 months (after block examination)
4. The module coordinators should present the objectives and timetables of the module
5. DME should present student and faculty feedback of the block
6. Examination department should present faculty and student feedback of the block/prof exam
7. Minutes should be compiled, presented in deans committee and recorded by DME department

Contributors

Development and Implementation of Modular Curriculum for 3rd Year MBBS	
Pioneer of the system /Chairman Curriculum Committee	Prof. Muhammad Umer (Vice Chancellor)
Co-Chairman Curriculum Committee	Prof Dr Rai Muhammad Asghar (Dean Medical Education) Dr Asma Khan (Assoc. Prof. HOD Pharmacology)
Module Planner & Author	Dr Omaira Asif Demonstrator/ Assistant Director DME
Focal person Forensic Medicine Department	Dr.Sajid Hameed (APMO)
Focal person Pathology Department	Dr. Mudassira Zahid (Assistant Prof)
Focal person Pharmacology Department	Dr Zunera Hakim (Assistant Professor)
Curriculum Committee members	Dr.Prof.Muhammad Umer, Prof. Dr Rai Muhammad Asghar, Prof Dr Lubna Ejaz, Prof Muhammad Hanif, Dr Asma Khan, Prof Wafa Umar, Dr Sajid Hameed, Dr Saima Ambreen, Dr Omaira Asif
Others: Computer Assistant	Muhammad Faisal

Modules of 4th Year M.B.B.S

Sr no.	Module	Time Scheduled	Blocks
1.	Otorhinolaryngology	5 weeks	1
2.	Ophthalmology	5 weeks	
3.	Endocrinology	5 weeks	3
4.	Population Health & Reproduction	7 weeks	
5.	Renal	4 weeks	4
6.	CNS & Psychiatry	7 weeks	

Academic Calendar Session 2019-2020



ACADEMIC CALENDAR SESSION 2019-2020

2023	2023-24																																																			
	March				April						May				June			July				August			September				October			November					December					January				February						
	6	13	18	26	3	8	10	15	17	22	30	2	20	22	23	3	5	30	1	3	15	17	18	4	26	28	2	4	28	30	2	11	24	1	11	13	18	20	27	28	1	4	7	8	31	4	10	18	25	2	3	16
	Block I							Block II							Block III										Block IV							Preparation Leaves Sendup																				
4 t h Y E A R	ENT Module	Sports Week		ENT Module (Conti)				Block Exam I	EYE Midoule	Eid ul Fitar		EYE Midoule (Conti)		Block Exam II	Endocrinology Module	Summer Vacations			Endocrinology Module (Conti)	Module Exam III	Reproduction Module		Block Exam III	Renal Module	Module Exam	CNS Module			Block Exam IV	Prep Leave Sendup	Sendup Block Exam I	Sendup Block Exam II	Sendup Block Exam III	Sendup Block Exam IV	Pre Exam Break	Annual Prof			Final Prof Result 2023													

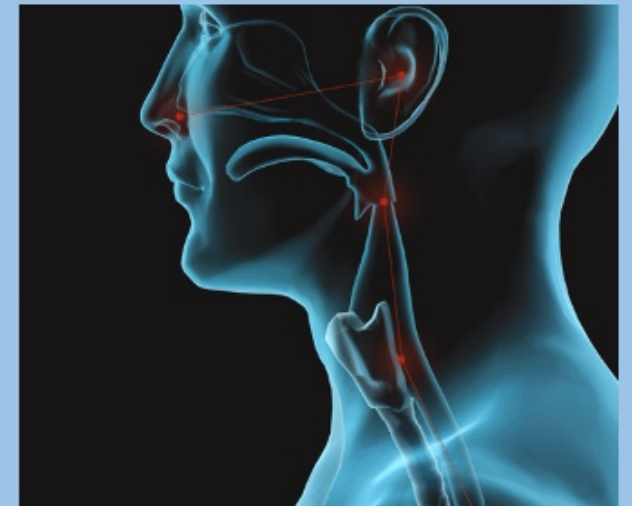
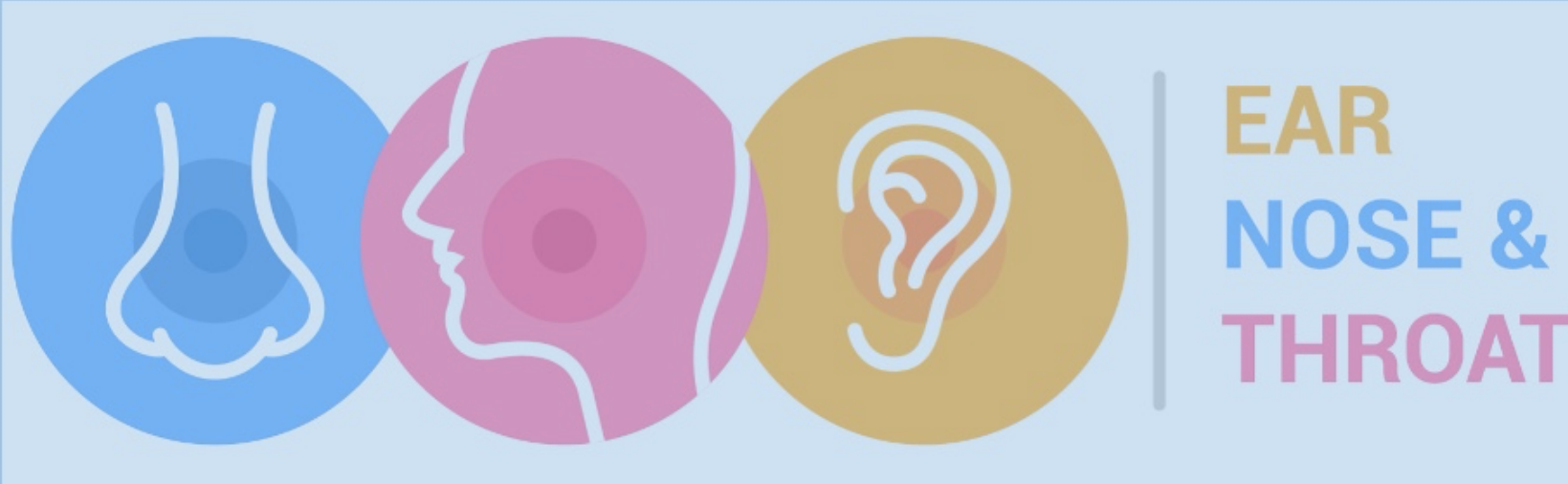


Rawalpindi Medical University

Otorhinolaryngology Module

Integrated Clinically Oriented Modular Curriculum

4th Year MBBS 2023



Department of Medical Education



Fourth Year MBBS 2023

Study Guide

Otorhinolaryngology (ENT) Module

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1.Otorhinolaryngology Module Team

Module Name : Otorhinolaryngology Module
Duration of module : 04 Weeks

Module Committee				Module Task Force Team	
1.	Vice Chancellor RMU	Prof. Dr. Muhammad Umar	1	Coordinator	Dr. Ashar Alamgir (Assistant Professor of ENT)
2.	Director DME	Prof. Dr. Rai Muhammad Asghar	2	DME Focal Person	Dr. Maryum Batool
3.	Convener Curriculum	Prof. Dr. Naeem Akhter			
4.	Dean Basic Sciences	Prof. Dr. Ayesha Yousaf			
5.	Additional Director DME	Prof. Dr. Ifra Saeed			
6.	Chairperson Otorhinolaryngology	Prof Nousheen Qureshi			
7.	Chairperson Community Medicine	Prof. Dr. Arshad Sabir			
			1	Director DME	Prof. Dr. Rai Muhammad Asghar
8.	Focal Person Otorhinolaryngology	Dr Huma	2	Add. Director DME	Prof. Dr. Ifra Saeed
9.	Focal Person Community Medicine	Dr Sana	3	Deputy Director DME	Dr Shazia Zaib
			4	Module planner & Implementation coordinator	Dr. Omaira Asif
			5	Editor	Dr Omaira Asif

Prepared by

Dr Ashar Alamgir

Assistant Professor ENT

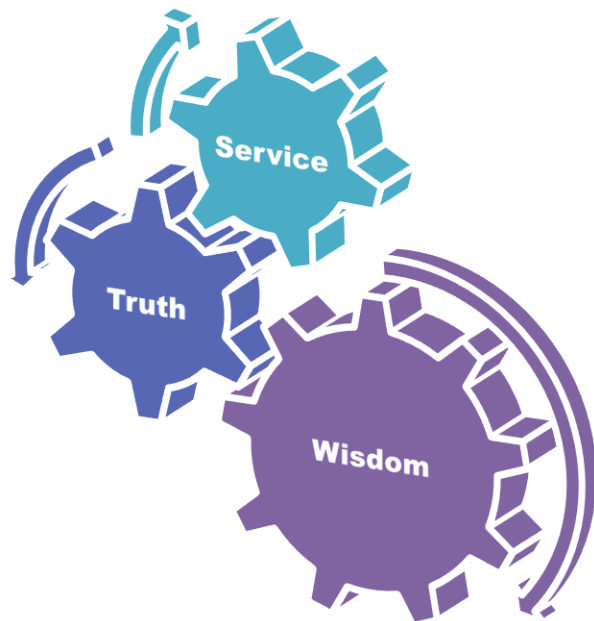
Rawalpindi Medical University, Rawalpindi

Prof. Dr Nousheen Qureshi

Professor/HOD ENT Department

Rawalpindi Medical University, Rawalpindi

RMU Motto



2.University Motto, Vision, Values & Goals

Mission Statement

To impart evidence-based research-oriented health professional education in order to provide best possible patient care and inculcate the values of mutual respect, ethical practice of healthcare and social accountability.

Vision and Values

Highly recognized and accredited centre of excellence in Medical Education, using evidence-based training techniques for development of highly competent health professionals, who are lifelong experiential learner and are socially accountable.

Goals of the Undergraduate Integrated Modular Curriculum

The Undergraduate Integrated Learning Program is geared to provide you with quality medical education in an environment designed to:

- Provide thorough grounding in the basic theoretical concepts underpinning the practice of medicine.
- Develop and polish the skills required for providing medical services at all levels of the Health care delivery system.
- Help you attain and maintain the highest possible levels of ethical and professional conduct in your future life.
- Kindle a spirit of inquiry and acquisition of knowledge to help you attain personal and professional growth & excellence.

3.Otorhinolaryngology Module Outcomes

Introduction: Otorhinolaryngology module provides integration of core concepts that underlie the foundation of basic sciences and their use in clinical medicine. This will eventually lead to develop critical thinking for integration and application of basic knowledge for clinical application.

Rationale: The Otorhinolaryngology module is designed to impart basic knowledge about Otorhinolaryngology and Community Medicine. This knowledge will serve as a base on which the student will construct further knowledge about the etiology, pathogenesis and prevention of diseases; the principles of their therapeutics and management.

Module Outcomes

Each student will be able to:

Knowledge

Acquire knowledge about the basic terminologies used in Otorhinolaryngology and Community Medicine as well as the concepts of diseases in the community

- Use technology based medical education including **Artificial Intelligence**.
- Appreciate concepts & importance of

- **Research**
- **Biomedical ethics**
- **Family medicine**

Skills

Interpret and analyze various practicals of Clinical Sciences.

Attitude

- Demonstrate a **professional attitude, team building spirit** and **good communication skills**

This module will run in 4 weeks duration. The content will be covered through introduction of topics. Instructional strategies are given in the time table and learning objectives are given in the study guides. Study guides will be uploaded on the university website. Good luck!

4. Terms & Abbreviations

Contents

- Domains of Learning
- Teaching and Learning Methodologies/Strategies
 - Large Group Interactive Session (LGIS)
 - Small Group Discussion (SGD)
 - Self-Directed Learning (SDL)
 - Case Based Learning (CBL)
 - Clinical / practicals

Tables & Figures

- Table 1. Domains of learning according to Blooms Taxonomy
- Figure 1. Prof Umar's Model of Integrated Lecture
- Table 2. Standardization of teaching content in Small Group Discussions
- Table 3. Steps of taking Small Group Discussions

5.Domains of learning according to Blooms Taxonomy

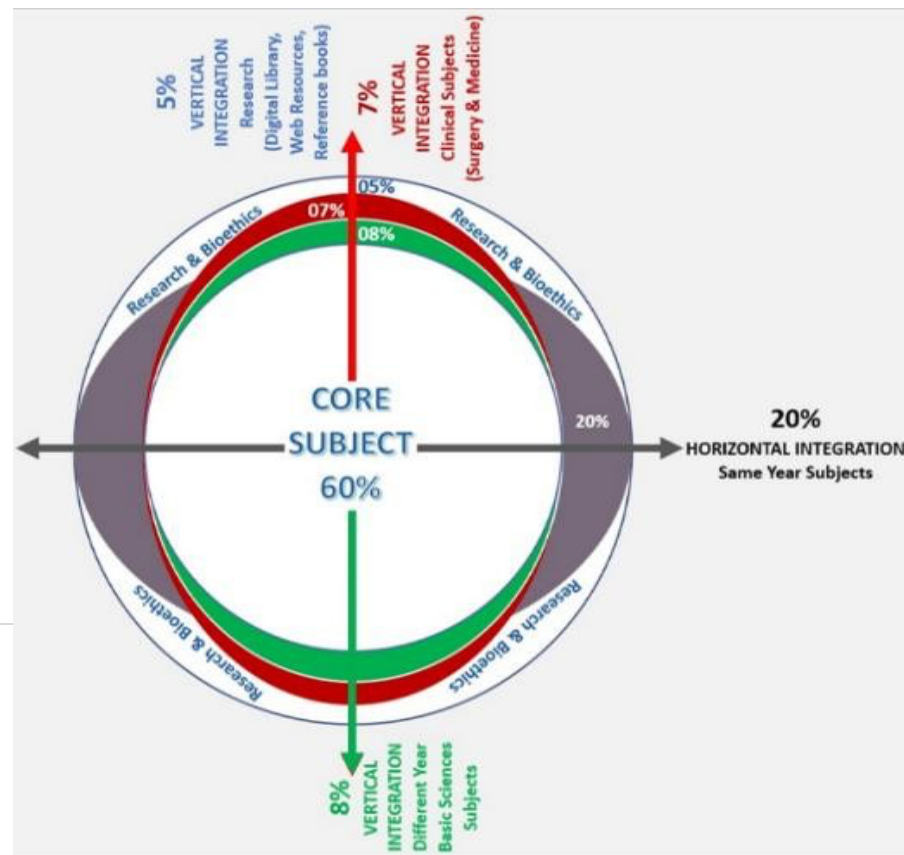
Sr. #	Abbreviation	Domains of learning
1.	C	Cognitive Domain: knowledge and mental skills.
	• C1	Remembering
	• C2	Understanding
	• C3	Applying
	• C4	Analyzing
	• C5	Evaluating
	• C6	Creating
2.	P	Psychomotor Domain: motor skills.
	• P1	Imitation
	• P2	Manipulation
	• P3	Precision
	• P4	Articulation
	• P5	Naturalization
3.	A	Affective Domain: feelings, values, dispositions, attitudes, etc
	• A1	Receive
	• A2	Respond
	• A3	Value
	• A4	Organize
	• A5	Internalize

6. Teaching and Learning Methodologies / Strategies

Large Group Interactive Session (LGIS)

The large group interactive session is structured format of Prof Umar Model of Integrated lecture. It will be followed for delivery of all LGIS. Lecturer will introduce a topic or common clinical condition and explains the underlying phenomena through questions, pictures, videos of patients, interviews and exercises, etc. Students are actively involved in the learning process.

**Figure 1. Prof Umar's
Model of Integrated Lecture**



7.Small Group Discussion (SGD)

This format helps students to clarify concepts acquire skills and attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics or power point presentations. Students exchange opinions and apply knowledge gained from lectures, SGDs and self study. The facilitator role is to ask probing questions, summarize and helps to clarify the concepts.

Table 2. Standardization of teaching content in Small Group Discussions

S.No	Topics	Approximate %
1	Title Of SGD	
2	Learning Objectives from Study Guides	
3	Horizontal Integration	5%+5% = 10%
4	Core Concepts of the topic	70%
5	Vertical Integration	10%
6	Related Advance Research points	3%
7	Biomedical Ethical points	2%
8	Spiral integration	5%

Table 3. Steps of taking Small Group Discussions

Step 1	Sharing of Learning objectives by using students Study guides	First 5 minutes
Step 2	Asking students pre-planned questions from previous teaching session to develop co-relation (these questions will be standardized)	5 minutes
Step 3	Students divided into groups of three and allocation of learning objectives	5 minutes
Step 4	ACTIVITY: Students will discuss the learning objectives among themselves	15 minutes
Step 5	Each group of students will present its learning objectives	20 min
Step 6	Discussion of learning content in the main group	30 min
Step 7	Clarification of concept by the facilitator by asking structured questions from learning content	15 min
Step 8	Questions on core concepts	
Step 9	Questions on horizontal integration	
Step 10	Questions on vertical integration	
Step 11	Questions on related research article	
Step 12	Questions on related ethics content	
Step 13	Students Assessment on online MS teams (5 MCQs)	5 min
Step 14	Summarization of main points by the facilitator	5 min
Step 15	Students feedback on the SGD and entry into log book	5 min
Step 16	Ending remarks	

8.Self Directed Learning (SDL)

- Self- directed learning is a process where students take primary charge of planning, continuing and evaluating their learning experiences.
- Time Home assignment
- Learning objectives will be defined
- Learning resources will be given to students = Text book (page no), web site
- Assessment: i Will be online on LMS (Mid module/ end of Module)
ii.OSPE station

Case Based Learning (CBL)

- It's a learner centered model which engages students in discussion of specific scenarios that resemble typically are real world examples.
- Case scenario will be given to the students
- Will engage students in discussion of specific scenarios that resemble or typically are real-world examples.
- Learning objectives will be given to the students and will be based on:
 - i. To provide students with a relevant opportunity to see theory in practice
 - ii. Require students to analyze data in order to reach a conclusion.
 - iii. Develop analytic, communicative and collaborative skills along with content knowledge.

Learning Objectives, Teaching Strategies & Assessments

Contents

- Introduction to RMU and Disciplines
- Medical Education and Integrated Disciplines
- Horizontally Integrated Basic Sciences (Anatomy, Physiology, Pharmacology, Pathology, Community Medicine)
- Large Group Interactive Session:
 - Otorhinolaryngology (LGIS)
 - Community Medicine (LGIS)
- Small Group Discussions
 - Otorhinolaryngology (SGD)
 - Community Medicine (SGD)
- Self Directed Topic, Learning Objectives & References
 - Otorhinolaryngology (SDL)
 - Community Medicine (SDL)
- Wards, operation theatres

Orientation Day Introduction to New Teaching Block & Hospital Disciplines

Medical Education And Integrated Disciplines			
Topic	Facilitator	Learning Objectives	Teaching Strategy
Introduction to RMU and Allied Hospitals	Vice Chancellor	Honorable VC will welcome and introduce the University and Allied Hospitals.	LGIS
The students will be able to:			
Introduction to Medical Education Department	Assistant Director DME	• Introduce DME	LGIS
		• Define Medical Education	
		• Discuss its role	
		• Appreciate role of DME in their curriculum	
		• Appreciate role of DME in attendance monitoring	
		• Illustrate the application	
		• Leave submission process	
Introduction to Pre-Clinical Sciences	Implementation In charge 4 th Year MBBS	• Introduction to Departments	LGIS
		• Introduction to Hospitals	
		• Discussion about Teaching & Learning strategies	
		• Assessment Model	
		• Discipline	
Introduction to Medicine & Allied	Lecture by Dean of Medicine & Allied	• Define medicine	LGIS
		• Discuss History of medicine	
		• Describe Islamic concepts of medicine	
		• Identify Basic sciences involved in medicine	
		• Identify Clinical subjects and their role	
		• Describe practice of medicine	
		• Describe the process	

9.LEARNING OBJECTIVES OF ENT (LGIS)

Topic	Learning objectives At the end of the lecture the student should be able to	Learning domain	Teaching strategy	Assessment tool
Otology				
Endoscopic anatomy of middle ear	<ul style="list-style-type: none"> Define middle ear cleft Parts of middle ear Physiology of middle ear 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Anatomy and physiology of ear and vestibular system	<ul style="list-style-type: none"> Parts of ear and vestibular system Functions of cochlea and vestibular system Biochemical processes of cochlea and vestibular system 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Acute otitis externa Malignant otitis externa	<ul style="list-style-type: none"> Definition of acute otitis externa and malignant otitis externa Clinical features, diagnosis, investigations Management plan 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Acute otitis media Otitis Media with effusion Eustachian tube catarrh	<ul style="list-style-type: none"> Definition of acute otitis media and otitis media with effusion Clinical features, diagnosis, investigations Management plan 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Chronic otitis media	<ul style="list-style-type: none"> Definition of chronic otitis media Clinical features, diagnosis, investigations Management plan 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Complications of chronic otitis media	<ul style="list-style-type: none"> Different types of complications of chronic otitis media Clinical features, diagnosis, investigations Management plans 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Facial nerve palsy	<ul style="list-style-type: none"> Anatomy of facial nerve, types of facial nerve palsy Clinical features, diagnosis, investigations Management plan 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Otosclerosis	<ul style="list-style-type: none"> Definition of otosclerosis, types, pathophysiology Clinical features, diagnosis, investigations Management plan 	C1 C2 C3	LGIS	SAQ MCQ OSCE

Pure tone audiometry Tympanometry BERA test ASSR test	<ul style="list-style-type: none"> Hearing assessment methods and tests Types of graphs Clinical implications and diagnoses 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Sensorineural hearing loss Noise induced hearing loss Meniere's disease Drug induced hearing loss	<ul style="list-style-type: none"> Definition of sensorineural, noise induced, drug induced hearing loss, Meniere's disease Clinical features, diagnosis, investigations Management plans 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Hearing aids Cochlear implant	<ul style="list-style-type: none"> Types of hearing aids Parts of cochlear implant Indication of hearing aids and cochlear implant 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Types of mastoidectomies	<ul style="list-style-type: none"> Canal wall up, canal wall down mastoidectomies Investigations before mastoid exploration Post operative care 	C1 C2 C3	LGIS	SAQ MCQ OSCE
	•			
Rhinology				
Anatomy and physiology of nose and paranasal sinuses	<ul style="list-style-type: none"> Anatomy of nasal septum, nasal cavity, paranasal sinuses Physiology of nasal septum, nasal cavity, paranasal sinuses Clinical aspects of anatomical variations 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Snoring and sleep apnoea	<ul style="list-style-type: none"> Definition of snoring and sleep apnoea Clinical features, diagnosis, investigations Management plans 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Nasopharyngeal angiofibroma	<ul style="list-style-type: none"> Origin of nasopharyngeal angiofibroma Clinical features, diagnosis, investigations Management plan 	C1 C2 C3	LGIS	SAQ MCQ OSCE
FESS	<ul style="list-style-type: none"> Definition of FESS Steps of FESS Complications of FESS 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Deviated Nasal Septum Rhinoplasty	<ul style="list-style-type: none"> Definition of deviated nasal septum, rhinoplasty Clinical features, diagnosis, investigations Management plans 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Acute and chronic rhinosinusitis	<ul style="list-style-type: none"> Definition of acute and chronic sinusitis Clinical features, diagnosis, investigations 	C1 C2	LGIS	SAQ MCQ

	<ul style="list-style-type: none"> Management plans 	C3		OSCE
Nasal polyps	<ul style="list-style-type: none"> Types and pathophysiology of nasal polyps 	C1	LGIS	SAQ
Allergic	<ul style="list-style-type: none"> Clinical features, diagnosis, investigations 	C2		MCQ
Infective	<ul style="list-style-type: none"> Management plans 	C3		OSCE
Complications of rhinosinusitis	<ul style="list-style-type: none"> Enumerate complications of rhinosinusitis Clinical features, diagnosis, investigations Management plans 	C1	LGIS	SAQ
		C2		MCQ
		C3		OSCE
Allergic rhinitis	<ul style="list-style-type: none"> Definition of Allergic Rhinitis Pathophysiology Clinical features, diagnosis, investigations Management plans 	C1	LGIS	SAQ
		C2		MCQ
		C3		OSCE
Radiology of nose and PNS	<ul style="list-style-type: none"> Important investigations done for nose and PNS Indications and findings Recent advances 	C1	LGIS	SAQ
		C2		MCQ
		C3		OSCE
Septal hematoma	<ul style="list-style-type: none"> What is Septal hematoma, septal abscess 	C1	LGIS	SAQ
Septal abscess	<ul style="list-style-type: none"> Clinical features, diagnosis, investigations Management plans 	C2		MCQ
		C3		OSCE
Basal cell carcinoma	<ul style="list-style-type: none"> What is BCC, SCC nose 	C1	LGIS	SAQ
Squamous cell carcinoma	<ul style="list-style-type: none"> Clinical features, diagnosis, investigations Management plans 	C2		MCQ
		C3		OSCE
Oral cavity, Head and Neck, Aerodigestive tract				
Acute Chronic tonsillitis	<ul style="list-style-type: none"> Anatomy of tonsils, retropharyngeal, parapharyngeal spaces 	C1	LGIS	
Peritonsillar abscess	<ul style="list-style-type: none"> Clinical features, diagnosis, investigations 	C2		SAQ
Retropharyngeal abscess	<ul style="list-style-type: none"> Management plans 	C3		MCQ
Parapharyngeal abscess				OSCE
Adenoiditis	<ul style="list-style-type: none"> What is adenoiditis Clinical features, diagnosis, investigations Management plans 	C1	LGIS	SAQ
		C2		MCQ
		C3		OSCE
Vocal nodules	<ul style="list-style-type: none"> What is vocal nodule, vocal polyp, Reinke's edema 	C1	LGIS	SAQ
Vocal polyps	<ul style="list-style-type: none"> Clinical features, diagnosis, investigations 	C2		MCQ
Reinke's edema	<ul style="list-style-type: none"> Management plans 	C3		OSCE
Ludwigs angina	<ul style="list-style-type: none"> What is Ludwigs angina Causative organism Clinical features, diagnosis, investigations Management plans 	C1	LGIS	SAQ
		C2		MCQ
		C3		OSCE

Diseases of salivary glands	<ul style="list-style-type: none"> • Anatomy and physiology of salivary glands • Diseases of salivary glands • Clinical features, diagnosis, investigations • Management plans 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Anatomy and physiology of oral cavity and pharynx	<ul style="list-style-type: none"> • Anatomy of oral cavity, pharynx • Blood supply of oral cavity, pharynx • Physiology of oral cavity and pharynx • Clinical implications 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Anatomy and physiology of Larynx, Trachea, bronchi	<ul style="list-style-type: none"> • Anatomy of larynx, trachea, bronchi • Physiology of larynx, trachea, bronchi • Nerve supply of larynx • Clinical implications 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Acute epiglottitis	<ul style="list-style-type: none"> • What is acute epiglottitis • Causative organism • Clinical features, diagnosis, investigations • Management plans 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Acute laryngo tracheo bronchitis	<ul style="list-style-type: none"> • What is laryngotracheobronchitis • Causative organism • Clinical features, diagnosis, investigations • Management plans 	C1 C2 C3	LGIS	SAQ MCQ OSCE
Carcinoma larynx	<ul style="list-style-type: none"> • Types of carcinoma of larynx • Etiological factors • Clinical features, diagnosis, investigations • Management plans 	C1 C2 C3	LGIS	SAQ MCQ OSCE

Community Medicine (LGIS)

TOPIC	Contents Outlines (Major Topics & Sub-Topics)	Learning objectives After The Session Students Will Be Able To:	Learning domain	Teaching strategy	Assessment tool
Introductory lecture	<ul style="list-style-type: none"> Intro to the subject of community medicine & public Health. Intro to IUGRC Scheme of learning 	<ul style="list-style-type: none"> Comprehend the definitions explaining the subjects. Identify applications of practices of Public Health. Follow the scheme of learning & assessment CM over the year. Follow scheme of learning IUGRC. 	C1 C2 C2 C2	LGIS	MCQs, SEQs, OSPE Viva
Fundamental concepts of Preventive medicine- I	<ul style="list-style-type: none"> Health & Disease Wellbeing & Positive Health Dimensions of health 	<ul style="list-style-type: none"> Describe public health aspects of Health & disease. Explain health wellbeing and positive Health with examples Explain dimensions of health 	C1 C2 C1	LGIS	MCQs, SEQs, OSPE Viva
Fundamental concepts of Preventive medicine- II	<ul style="list-style-type: none"> Health Assessment (Indicators) Quality of life indicators Health indexes Approaches to disease prevention & control 	<ul style="list-style-type: none"> Explains attributes of good statistical indicators of health & disease Describe health indicators Comprehend & calculate health indicators & Indexes Explains public health approaches to diseases prevention 	C1, C2 C1 C3 C1 , C2	LGIS	MCQs, SEQs, OSPE Viva
Levels of prevention	<ul style="list-style-type: none"> Natural History of disease Models of Disease causation Levels of prevention 	<ul style="list-style-type: none"> Explains natural history disease concepts in context of prevention. Explains models of disease causation with examples. Apply levels of prevention and modes of intervention 	C2 C2 C3	LGIS	MCQs, SEQs, OSPE Viva
Fundamental Concepts & Uses of Epidemiology	<ul style="list-style-type: none"> Definition of epidemiology Explanation of concepts (Time- place-Person & Epidemiological triangle) Epidemiologic approach to health problems 	<ul style="list-style-type: none"> Explains epidemiology as a fundamental science of public health. Explain major concepts embodied in definition. Comprehend & explains epidemiologic approach to health problems Enumerate uses of epidemiology 	C2 C2 C2 C1	LGIS	MCQs, SEQs, OSPE Viva

Introduction to Epidemiologic Methods	<ul style="list-style-type: none"> Epidemiologic Methods / studies Descriptive epidemiology- types & step of descriptive studies Steps of descriptive studies Migration studies 	<ul style="list-style-type: none"> Explain classification of epidemiologic study designs. Comprehend types of descriptive studies Explain steps of Descriptive study Describe theme of Migration study designs . 	C2 C2 C2 C1	LGIS	MCQs, SEQs, OSPE Viva
Analytical studies (case-control studies)	<ul style="list-style-type: none"> Fundamental concept of case- control study designs Steps of case control studies Bias & Matching Odds ratio Limitations of case-control studies 	<ul style="list-style-type: none"> Explain rationale of Case-Control study designs Describe & apply steps for undertaking a Case-Control study Comprehend Bias issues and perform matching Calculate & interpret Odds Ratio Explain limitations of Case-Control studies 	C2 C2 C3 C3 C2	LGIS	MCQs, SEQs, OSPE, Viva
Analytical studies (cohort studies)	<ul style="list-style-type: none"> Fundamental concept of Cohort study design Steps to conduct Cohort studies Measures of association in Cohort Study designs (Relative Risk) Types of Cohort-Study Limitations of cohort studies Differences b/w Cohort- & Case Control study designs . 	<ul style="list-style-type: none"> Explain rationale of Cohort- study design Comprehend & apply steps for undertaking a Cohort-study in given scenario Calculate & interpret measures association in Cohort-study Differentiate Cohort-study designs from C-C studies. 	C1, C2 C2, C3 C2, C3 C2	LGIS	MCQs, SEQs, OSPE Viva
Experimental Epidemiologic study designs	<ul style="list-style-type: none"> Fundamental concept of Experimental Epidemiologic designs Steps of undertaking a Randomized Controlled Trial (RCT) Randomization & Blinding Types Experimental Epidemiologic study designs 	<ul style="list-style-type: none"> Explain Fundamental concept of Experimental Epidemiologic designs Apply general Steps of undertaking a Randomized Controlled Trial (RCT) in required scenario Apply Randomization & Blinding in required situation Explain Types Experimental study designs . 	C2 C2 & C3 C3 C1, C2	LGIS	MCQs, SEQs, OSPE and Viva Voce
Comparative review of all Epidemiological study designs	<ul style="list-style-type: none"> Comparative review based on Study population Concepts of study group and control group Data collection modes Statistical components used in each design Etiologic significance Advantages & 	<ul style="list-style-type: none"> Comprehend & differentiate parallel concepts of all study designs Choose right study designs in given scene Choose right analytical techniques for the given study design selected Comprehend & choose right study population / groups for the study designs appropriate to given scene 	C2 C3 C3	LGIS	MCQs, SEQs, OSPE and Viva Voce

	limitations of each design	<ul style="list-style-type: none"> Comprehend & apply right statistical techniques for the studies undertaken under the given scene. Comprehend Etiologic significance, advantages & limitations of each design in relevance to each other. 	C3 C3 C2		
Association & Causation	<ul style="list-style-type: none"> Statistical significance & clinical significance Hill's criterion for judging causality of association 	<ul style="list-style-type: none"> Describes Types of association Explains requirements for disease causation Explain difference b/w statistical significance and clinical significance Apply Hill's criterion for judging causality of association. 	C1 C2 C2 C3	LGIS	MCQs, SEQs, Viva Voce and OSPE
Sampling-I	<ul style="list-style-type: none"> Non probability sampling Sample size 	<ul style="list-style-type: none"> Define and comprehend the definition & rationale of sampling. Understand the Concept of non-probability sampling technique Enlist the types of non-probability sampling Appraise different scenarios to apply different non - probability technique Calculate sample size for any study design 	C2 C2 C1 C3 C3	LGIS	MCQs, SEQs, Viva Voce and OSPE
Sampling-II	<ul style="list-style-type: none"> Probability sampling 	<ul style="list-style-type: none"> Enlist the types of probability sampling. Appraise different scenarios to apply different probability technique (04 primary methods) Compare probability sampling technique with non-probability sampling technique keeping in mind its pros and cons. 	C1 C3 C2	LGIS	MCQs, SEQs, Viva Voce and OSPE

Droplet infections- I	<ul style="list-style-type: none"> • Smallpox • Chicken Pox • measles 	<ul style="list-style-type: none"> • Explain the strategy adopted for eradication of smallpox. • Describe the WHO response in case of any bioterrorism. • Describe the epidemiology of chicken pox & measles. • Explain modes of transmission and incubation period of chicken pox & measles. • Identify the high risk individuals who are most susceptible to get the chicken pox & measles • Differentiate skin rashes of chicken pox & measles. • Recommend prevention and control measures of chicken pox & measles in community. • Recommend prevention and control measures of chicken pox & measles in institutional outbreaks • Explain the steps of WHO Measles Elimination Strategy in the community. 	C2 C2 C1 C2 C2 C2 C3 C2	LGIS	MCQs, SEQs, Viva Voce and OSPE
Droplet infections- II	<ul style="list-style-type: none"> • Rubella • Pertussis • Mumps 	<ul style="list-style-type: none"> • Describe the epidemiology of mumps, rubella, and pertussis. • Explain the modes of transmission and incubation period of mumps, rubella, and pertussis. • Identify the high-risk individuals who are most susceptible to get rubella, pertussis, mumps. • Describe the cases based on epidemiological features. • Enlist the complications of mumps rubella, pertussis. • Apply prevention and control measures of mumps, rubella, and pertussis in community. • Explain Congenital Rubella Syndrome (CRS) as public health issue. 	C1 C1 C2 C3 C1 C3 C2	LGIS	MCQs, SEQs, OSPE and Viva Voce

Droplet infections- III	<ul style="list-style-type: none"> • Meningitis • Influenza • COVID • Diphtheria 	<ul style="list-style-type: none"> • Describe public health importance of Meningitis, influenza, COVID, diphtheria in global and local context. • Describe the epidemiology of Meningitis, influenza, COVID, diphtheria. • Enlist the modes of transmission and incubation period of Meningitis, influenza, COVID, diphtheria. • Identify the high-risk individuals who are most susceptible to get these diseases. • Diagnose the cases based on signs and symptoms. • Enlist the complications of Meningitis, influenza, COVID, diphtheria • Recommend prevention and control measures of Meningitis, influenza, COVID, diphtheria in community. • Differentiate between antigenic drift and antigenic shift with reference to Influenza. 	C2 C2 C1 C2 C3 C2 C3 C2	LGIS	MCQs, SEQs, OSPE and Viva Voce
Droplet infections- IV	<ul style="list-style-type: none"> • Tuberculosis 	<ul style="list-style-type: none"> • Describe the public health importance of Tuberculosis in global and local context. • Describe the epidemiology of Tuberculosis. • Identify the risk factors and high risk population of the disease. • Explain case definition of tuberculosis. • Explain various case finding measures for TB. • Recommend prevention and control of Tuberculosis in community. • Enumerate components of End TB Strategy. Including TB-DOTs strategy. • Differentiate primary, secondary drug resistance and MDR-TB and XDR-TB. • Apply levels of prevention for control of TB in community. 	C2 C2 C1 C2 C3 C3 C2 C3	LGIS	MCQs, SEQs, OSPE and Viva Voce

Small Group Discussion (SGDs) Otorhinolaryngology

SGD IN ENT WARDS	At The End Of SGD Student Should Be Able To	Learning Domains	Assessment Tool
Anatomy of ear and vestibular system	<ul style="list-style-type: none"> Parts of ear and vestibular system How to examine ear and vestibular system 	C2	MCQ SAQ OSPE
Physiology of ear and vestibular system	<ul style="list-style-type: none"> Functions of cochlea and vestibular system Biochemical processes of cochlea and vestibular system 	P	MCQ SAQ OSPE
Acute otitis externa Malignant otitis externa	<ul style="list-style-type: none"> Definition of acute otitis externa and malignant otitis externa Clinical features, diagnosis, investigations Management plan 	C1	MCQ SAQ OSPE
Otitis media with effusion Eustachian tube catarrh	<ul style="list-style-type: none"> Definition of acute otitis media and otitis media with effusion Clinical features, diagnosis, investigations Management plan 	P	MCQ SAQ OSPE
Epistaxis and management	<ul style="list-style-type: none"> Types of epistaxis, how patient presents Clinical features, diagnosis, investigations Emergency and definitive management plan 	C2	MCQ SAQ OSPE
Types of hearing loss and their management	<ul style="list-style-type: none"> Types of hearing loss Investigations Hearing aids Cochlear implant Speech therapy 	C3	MCQ SAQ OSPE
Causes of otalgia and referred otalgia	<ul style="list-style-type: none"> What is otalgia and referred otalgia How to take history and examine the patient Differential diagnosis Investigations Management 	C1	MCQ SAQ OSPE
Discuss different types of mastoidectomies in ENT ward class room	<ul style="list-style-type: none"> Types of mastoidectomies Indications Steps of mastoidectomy Complications 	C2	
Anatomy and physiology of nose and PNS	<ul style="list-style-type: none"> Anatomy of nose and PNS Physiology of nose and PNS Examination of nose and PNS 	C3	MCQ SAQ OSPE

	DNS, Sinusitis, Angiofibroma	<ul style="list-style-type: none"> • How to take history, examine the patient • Clinical features, diagnosis, investigations • Management plans 	C3	MCQ SAQ OSPE
	Rhinoplasty	<ul style="list-style-type: none"> • Types • Examination steps • Investigations • Surgical steps • Complications 	C2	MCQ SAQ OSPE
	Acute chronic rhinosinusitis	<ul style="list-style-type: none"> • Definition of acute and chronic sinusitis • Clinical features, diagnosis, investigations • Management plan 	C2	MCQ SAQ OSPE
	Discuss radiology of Nose and PNS in ENT wards	<ul style="list-style-type: none"> • Important investigations done for nose and PNS • Indications and findings • Recent advances 	C1	MCQ SAQ OSPE
	Discuss septal abscess, septal hematoma in ENT ward	<ul style="list-style-type: none"> • How to diagnose septal hematoma and septal abscess on patient • Management steps 	C2	MCQ SAQ OSPE
	Discuss anatomy and physiology of larynx, trachea, bronchi in ENT ward	<ul style="list-style-type: none"> • Anatomy of larynx, trachea, bronchi • Physiology of larynx • Nerve supply of larynx • Examination of larynx, trachea • 	C3	MCQ SAQ OSPE
	Discuss acute tonsillitis Chronic tonsillitis, Peritonsillar abscess Retropharyngeal abscess Parapharyngeal abscess in ENT ward	<ul style="list-style-type: none"> • How patients present • History taking • Examination steps • Investigations • Management • 	C3	MCQ SAQ OSPE

Small Group Discussion (SGDs) Community Medicine

Demonstration	Contents Outlines (Major Topics & Sub-Topics)	Learning objectives	Learning domain	Teaching strategy	Assessment tool
An exercise of tools of measurement in epidemiology- Measurement of Morbidity	<ul style="list-style-type: none"> • Concepts & formulae of Epidemiologic tools used for measurements of diseases in the community. • Various types of morbidity rates • Calculation of Incidence Rate Prevalence Rate • Relation b/w Incidence and Prevalence 	<ul style="list-style-type: none"> • Comprehend statistical tools used for measurement of disease in the population. • Calculate incidence rate and prevalence rates in various scenarios • Derive relationship in incidence rates and prevalence Rates. • Interpret relationship in incidence rates and prevalence Rates. • Identify uses of morbidity data 	C2	SGD	MCQs, SEQs, OSPE and Viva Voce
			C3		
			C3		
			C3		
An exercise of tools of measurement in epidemiology- Measurement of mortality	<ul style="list-style-type: none"> • Review of Basic tools of measurements in epidemiology • Measurement of Mortality • Issues of recording morality • Types of Mortality Rates • Standardization of Mortality Rate 	<ul style="list-style-type: none"> • Quantification of mortality data • Comprehend issue in death certification. • Practice methods of standardization of morality rates • Calculate 04 types of Mortality rates in various scenarios • Identify uses of morality data 	C2	SGD	MCQs, SAQs, OSPE and Viva Voce
			C3		
			C3		
			C3		
			C2		

Self Directed Learning (SDL) Otorhinolaryngology

Sr #	Topics Of SDL	Learning Objectives	Learning resources
1.	Radiology of ear And mastoid	<ul style="list-style-type: none"> • Radiological investigations done for ear and mastoid • X ray mastoid oblique view, CT scan temporal bone (axial, coronal views) • Indications of radiological investigations • Findings on radiological investigations 	<ul style="list-style-type: none"> • Diseases of Ear, Nose and Throat & Head and Neck Surgery, 4th edition PL Dhingra • Section IX page 386
2.	Vasomotor Rhinitis and its differentials	<ul style="list-style-type: none"> • What is vasomotor rhinitis • Etiology • Investigations • Management 	<ul style="list-style-type: none"> • Diseases of Ear, Nose and Throat & Head and Neck Surgery, 4th edition PL Dhingra • Section II page 160
3.	Acute otitis media/Chronic otitis media / Cholesteatoma	<ul style="list-style-type: none"> • Definition • Etiology • Investigations • Treatment options • Surgical options 	<ul style="list-style-type: none"> • Diseases of Ear, Nose and Throat & Head and Neck Surgery, 4th edition PL Dhingra • Section I pages 61,66

Sr #	Topics Of SDL	Learning Objectives	Learning resources
4.	Laser and cryosurgery in otorhinolaryngology	<ul style="list-style-type: none"> • Types of lasers • Uses of lasers in ENT • Hazards of lasers 	<ul style="list-style-type: none"> • Ear, Nose and Throat, Self-Assessment and Self Evaluation Manual, 7th Edition, PL Dhingra • Section VII pages 315, 317
5.	Anatomy and physiology of esophagus, trachea, bronchi	<ul style="list-style-type: none"> • Anatomy of esophagus, trachea, bronchi • Physiology of esophagus, trachea, bronchi • Anatomical variations 	<ul style="list-style-type: none"> • Diseases of Ear, Nose and Throat & Head and Neck Surgery, 4th edition PL Dhingra • Section V, VI pages 259, 301
6.	Vocal cord paralysis Radiology of neck and aerodigestive tract	<ul style="list-style-type: none"> • Nerve supply of larynx • Radiological investigations for larynx and esophagus • Indication of radiological investigations 	<ul style="list-style-type: none"> • Diseases of Ear, Nose and Throat & Head and Neck Surgery, 4th edition PL Dhingra • Section V, VI pages 275, 386

OBSTETRICS & GYNAECOLOGY LEARNING OBJECTIVES (LGIS)

SECOND WEEK								
S. No.	Date	Day	Teacher	Region	Topic	Learning objectives	Level	Assessment
1	15-03-23	WEDNESDAY	Dr Humera Noreen	Obstetrics	Preparation for obstetric ward LGIS	Orientation of obstetric department Define the antenatal & postnatal care Ethics to communicate with female patients Bed-side manners Dress-code especially for male students Principles of privacy & Confidentiality of obstetric patient	C1 C1 A2	OSCE
2	18-03-23	SATURDAY	Prof Tallat Farkhanda	Obstetrics	History & examination of obstetric patient LGIS	Elicit booking history and examination To know the investigations in each trimester To differentiate between low and high risk pregnancy	C1 C2 C2	OSCE

Self Directed Learning (SDL) Community Medicine

Topic	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives	Assessment tool		Learning resource
			LMS	END MODULE	
Epidemiologic Investigation	Disease outbreak & epidemic – review (epidemic, endemic & pandemic) Types of epidemics Steps of an epidemiologic investigation Covid-19 a case study Exercise of undertaking investigation of outbreaks in various given scenarios.	Describes public approach to deal with disease outbreaks & epidemics. Classify types and levels disease epidemics or outbreaks. Explain steps of investigating a disease outbreak situation. Delineates epidemiologic investigation levels involved in Covid-19 Apply steps of epidemiologic investigation in various given scenarios (Exercises) Able to read relevant research article	MCQ	OSPE VIVA SAQ	K. Park Ed. 27 th Page no. 146

Peer assisted learning (PAL)* IUGRC Contact Session

Contact Session I Time duration: 2hrs / batch

Indicators of accomplishment Prior readings / assigned work	Learning objectives/ competencies	Learning outcomes	Assessment strategy
Able to reflect on Elements of proposal writings. Reflect on relevant literature search and on some articles close to topic of interest. Reflect on point to research topic selection.	Interactive discussion on how to; How to and what literature / sources reviewed for topic selection. To perform advanced search option to modify, refine the topic & search for new ideas/perspectives organize research idea or general thought into a topic that can be configured into research problem / formulating research question brief outline of study proposal in chronological order develop data collection tool do reflective learning	Each student be able to; Develop the list of useful keywords for relevant literature search Perform review of relevant Literature to refine how to approach selected topic and finding a way to analyze it. review community health profile data bases, EMBASE, MEDLINE, PubMed, Google scholar Ovid, ProQuest Psych INFO, Cochrane Database, Scopus) etc. identify knowledge gaps formulate appropriate research questioning the form of a study proposal Attempt “reflective writing.	MCQ in end of block block exam Viva exam at the end of the session

SECTION III

Basic And Clinical Sciences (Vertical Integration)

Content

- CBLs
- Vertical Integration LGIS

Basic And Clinical Sciences (Vertical Integration)

Case Based Learning (CBL) Otorhinolaryngology

Subject	Topic Learning Objectives At the end of the lecture the student should be able to	Learning Domain
OTOLOGY	<ul style="list-style-type: none"> • Ear examination in ENT wards on patients • Examination of hearing and vestibular system on patients in ENT ward • History and examination of Acute otitis externa • Malignant otitis externa patients in ENT ward • History and examination of Otitis media with effusion Eustachian catarrh patients in ENT ward • Management of otitis media in ENT wards on patients • Examination of hearing and vestibular system on patients and interpretation in ENT ward • History and examination of patients with otalgia in ENT ward • Demonstration of mastoidectomy patients in ENT operation theatre • History taking and Nose and PNS examination in ENT wards on patients 	CBL CBL CBL CBL CBL CBL CBL CBL CBL CBL
RHINOLOGY	<ul style="list-style-type: none"> • Septoplasty, SMR, FESS on patients • Demonstrate rhinoplasty on patients in ENT OT • Demonstrate acute and chronic sinusitis on patients in ENT ward • History taking, examination of oral cavity, pharynx in ENT wards on patients • Demonstrate septal hematoma, septal abscess, Basal cell carcinoma, squamous cell carcinoma on patients in ENT ward 	CBL CBL CBL CBL CBL

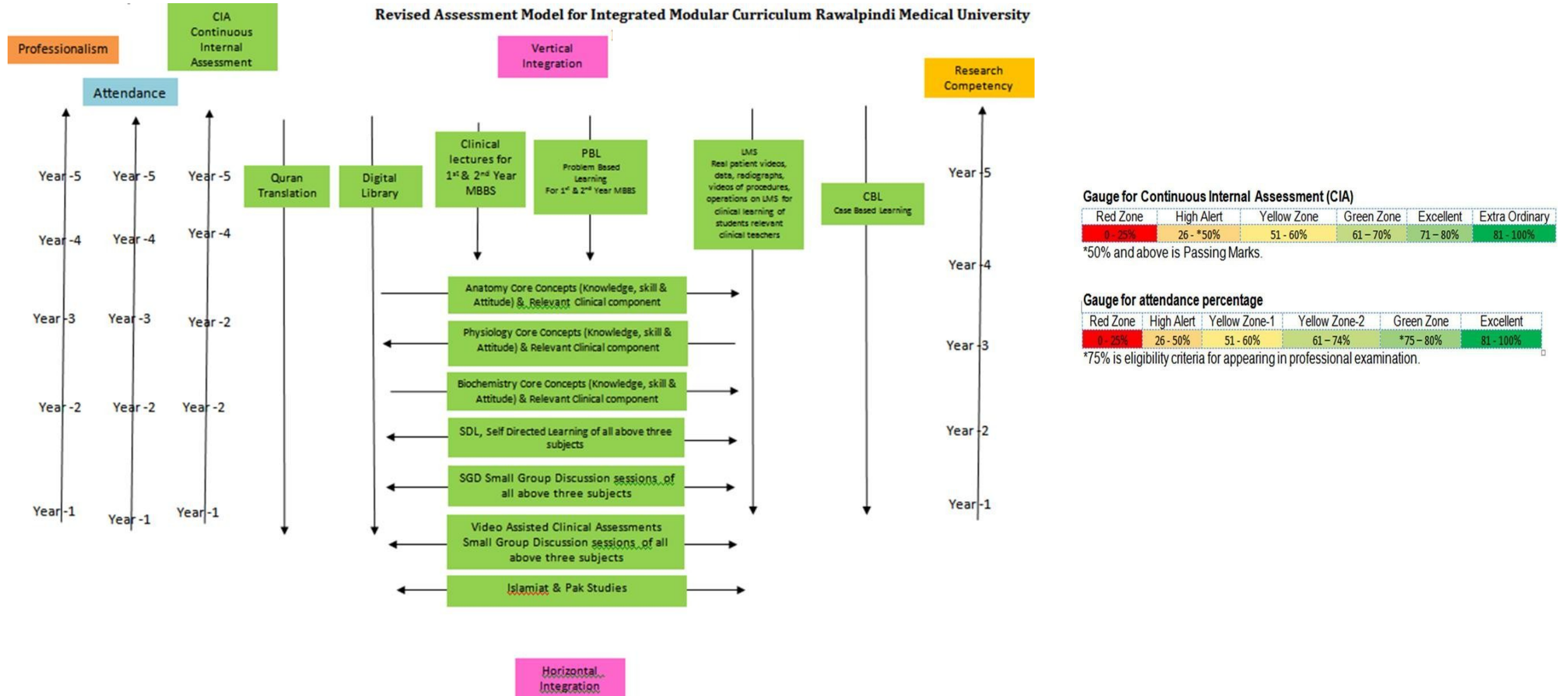
Subject	Learning Objectives	Learning Domain
HEAD AND NECK	<p>At the end of the lecture the student should be able to</p> <ul style="list-style-type: none">• History taking, examination of larynx, trachea, bronchi, neck on patients in ENT ward• Demonstrate acute, chronic tonsillitis, peritonsillar abscess, retropharyngeal, parapharyngeal abscess on patients in ENT ward• Examination of salivary glands• Investigations of salivary glands diseases	CBL
		CBL
		CBL
		CBL

10.Assessment Policies

Contents

- Assessment plan
- Types of Assessment:
- Modular Examinations
- Block Examination
- Table 4: Assessment Frequency & Time in Otorhinolaryngology Module

10.Assessment Policies



11.Assessment plan

University has followed the guidelines of Pakistan Medical and Dental Council for assessment. Assessment is conducted for SDL, SGD, mid modular, block/module levels.

Types of Assessment:

The assessment is formative and summative.

Formative Assessment

Formative assessment is taken from topics of SDL,SGD (MS TEAM).

Summative Assessment:

Summative assessment is taken at the mid modular, modular/block levels.

Modular Examinations

Theory Paper

There is a module examination at the end of first module. The content of the whole teaching of the module are tested in this examination.

It consists of paper with objective type questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module. (Annexure I attached)

Block Examination

On completion of a block which consists of two modules, there is a block examination which consists of one theory paper and OSPE.

Theory Paper

There is one written paper for each subject. The paper consists of objective type questions (MCQ) and structured essay questions (SAQ). The distribution of the questions is based on the Table of Specifications of the module.

Block OSPE

This covers the practical content of whole block.

11.ASSESSMENT PLAN

Types of Assessment:

- 1. Formative
- 2. summative

Formative Assessment

Formative assessment will be done at the mid of module of SDL and SGD through LMS at end of 2nd week. Assessment of clinical lectures on LMS. Tool for this assessment will be one best choice question.

Summative Assessment:

Summative assessment will be taken at the end of module, block and will be subject wise.

MID MODULE EXAM

It will be taken at the end of 3rd week of module. Theory Paper (50 MCQS) 50 marks based on table of specifications (TOS).

BLOCK EXAMINATION

On completion of a block which consists of ONE ENT modules, there will be a block examination which consists of one theory paper and OSPE.

Theory Paper

The paper will be of objective type questions and short answer questions. The distribution of the questions will based on the Table of Specifications of the module.

OSPE:

This will cover the practical content of whole block.

3 wards tests in all three ENT units at the end of 2 weeks ward (OSCE) (10 stations x 5 = 50 marks) (10 MCQs) TOTAL = 60 marks

Schedule of Assessment
OTORHINOLARYNGOLOGY
MODULE/BLOCK

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Remarks	Remarks	Colander schedule
1 st	One best option MCQs test	CIA	Mid module at the end of 03 weeks	LMS	Credit will be part of IA	25 March 2023
2 nd	MCQ, SEQs, based examination	CIA	End of module /block exam	On campus test	Credit will be part of IA	07 April 2023
3 rd	OSPE	CIA	End of module /block exam	On campus test	Credit will be part of IA	08 April 2023

12.Assessment Frequency & Time In Otorhinolaryngology Module

Block		Otorhinolaryngology Module	Type of Assessments	Total Assessments Time			No. of Assessments	
	Sr #	Otorhinolaryngology Module Components		Assessment Time	Summative Assessment Time	Formative Assessment Time		
Otorhinolaryngology Block	1	Mid Module Examinations 25 March 2023 (Otorhinolaryngology, Community Medicine) (100 marks 50 MCQs)	Summative	60 Minutes	300 minutes (5 hours)	30 Minutes	1 Formative	2 Summative
	2	Topics of SDL and SGD Examination on MS Team (50 marks 25 MCQs) 26 March 2023	Formative	30 Minutes				
	3	End Module Examinations (10 SAQ & 55 MCQs) 50 marks SAQ, 55 marks MCQs 7 April 2023	Summative	120 minutes				
		Otorhinolaryngology OSPE 70 marks 8 April 2023	Summative	50 Minutes				
		Community Medicine OSPE 35 marks 8 April 2023	Summative	10 Minutes				
	4	Ward test at the end of two weeks in every hospital 3 ward tests MCQ 10 MARKS (OSCE 10x5=50) (TOTAL=60 marks)	Summative	60 minutes	MCQ 10 marks OSCE (10 x 5 stations) 50 marks			

13.Table of Specification (TOS)

MID MODULE ASSESSMENT Fourth Year MBBS 2023 25 MARCH 2023

Sr. #	Discipline	No. of MCQs	No. of MCQs according to cognitive domain			Total
			C1	C2	C3	
1.	Otorhinolaryngology	35	20	10	05	70
2.	Community Medicine	15	10	03	02	30
		50	30	13	07	100

END OF BLOCK / MODULE ASSESSMENT

Fourth Year MBBS 2023

07-08 APRIL 2023

Sr. #	Discipline	No. of MCQs(%)	No. of MCQs according to cognitive domain			No. of SAQs (%)		No. of SAQs according to cognitive domain			OSPE	Total Marks	Internal assessment
			C1	C2	C3	No. of items	Marks	C1	C2	C3			
1.	Otorhinolaryngology	35	20	10	5	07	35	3	2	2	70	140	90 marks (60 ENT 30 CMED)
2.	Community Medicine	20	10	7	3	03	15	1	1	1	35	70	
Grand Total											210+90		300

Internal assessment break up

End of block assessment 50% (30 marks)	Work Place Based Assessment 50% (30 marks)			
	Ward test	Evening ward duties	Histories	Case presentation
	50%	10%	20%	20%
	15	03	06	06
		More than 3 = 1.5 marks Less than 3 = 0 marks	Complete 5 histories = 06 marks Incomplete 5 histories = 04 marks Less than 5 histories = zero marks	1 case presentation = 06 marks No case presentation = zero marks

CLINICAL CLERKSHIP OTORHINOLARYNGOLOGY

4TH YEAR OTORHINOLARYNGOLOGY CLINICAL CLERKSHIP

HOLY FAMILY HOSPITAL

DURATION TWO WEEKS

Morning: 10.30 am to 02.00 pm

Evening: 02.00 pm to 04.00 pm



Day	Specialty	Topic	SPECIFIC LEARNING DOMAINS			COGNITION			PSYCHOMOTOR		AFFECTIVE		MIT
			Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2	
FIRST WEEK													
Monday	OTOLOGY	History & examination of ear		*	*	*			*		*		Bedside
Tuesday		Acute & chronic otitis media, otitis media with effusion, otosclerosis		*	*	*	*						SGD
Wednesday		Tympanoplasty, myringotomy, foreign body ear		*	*		*		*		*		OT
Thursday					*	*		*		*		*	
SECOND WEEK													
Monday	OTOLOGY	Pure tone audiometry, tympanometry, BERA, ASSR, Radiology in otology				*	*						SGD
Tuesday		Epley’s maneuver		*	*			*	*		*		Bedside
Wednesday		Mastoidectomy, grommet insertion, stapedectomy, stapedotomy		*	*		*		*		*		OT
Thursday	WARD TEST(10 MCQ = 10 MARKS) (OSCE 10 STATIONS = 10X5 = 50 MARKS)												OSCE
Emergency duty from 2 to 4 pm in Emergency room, managing emergencies of ear like ear trauma, temporal fractures, foreign body ear, hematoma auris ETC													

CLINICAL CLERKSHIP OTORHINOLARYNGOLOGY



4TH YEAR OTORHINOLARYNGOLOGY CLINICAL CLERKSHIP

BENAZIR BHUTTO HOSPITAL

DURATION TWO WEEKS

Morning: 10.30 am to 02.00 pm

Evening: 02.00 pm to 04.00 pm



Day	Specialty	Topic	SPECIFIC LEARNING OBJECTIVES			COGNITION			PSYCHOMOTOR		AFFECTIVE		MIT
			Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2	
FIRST WEEK													
Monday	RHINOLOGY	History of patient with nasal and sinus problems	*	*	*	*			*		*		Bedside
Tuesday		Acute, chronic, allergic rhinosinusitis, nasal polyps, vasomotor rhinitis, atrophic rhinitis	*			*	*						SGD
Wednesday		Septoplasty, turbinoplasty, rhinoplasty,	*	*	*		*		*		*		OT
Thursday		Examination of nose and paranasal sinuses	*	*	*		*		*		*		Bedside
SECOND WEEK													
Monday	RHINOLOGY	Radiology in rhinology	*			*	*						SGD
Tuesday		DNS, Angiofibroma, allergic fungal polyposis, foreign body nose	*	*	*			*	*		*		SGD
Wednesday		FESS, Caldwell Luc, antrostomy, polypectomy	*	*	*		*		*		*		OT
Thursday	WARD TEST(10 MCQ = 10 MARKS) (OSCE 10 STATIONS = 10X5 = 50 MARKS)												OSCE
Emergency duty from 2 to 4 pm in Emergency room, managing emergencies of nose like epistaxis, anterior nasal packing, posterior nasal packing, cauterization, foreign body removal ETC													

CLINICAL CLERKSHIP OTORHINOLARYNGOLOGY



4TH YEAR OTORHINOLARYNGOLOGY CLINICAL CLERKSHIP

DISTRICT HEADQUARTER HOSPITAL

DURATION TWO WEEKS

Morning: 10.30 am to 02.00 pm

Evening: 02.00 pm to 04.00 pm



Day	Specialty	Topic	SPECIFIC LEARNING OBJECTIVES			COGNITION			PSYCHOMOTOR		AFFECTIVE		MIT
			Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2	
FIRST WEEK													
Monday	LARYNGO PHARYNGOLOGY HEAD &. NECK	Oral cavity, oropharynx, hypopharynx, larynx, neck history taking	*	*	*	*			*		*		Bedside
Tuesday		Acute, chronic pharyngitis, tonsillitis, Ludwig’s angina, peritonsillar abscess	*			*	*						SGD
Wednesday		Tonsillectomy, adenoidectomy, parotidectomy, Sistrunk’s operation	*	*	*		*		*		*		OT
Thursday		Examination of oral cavity, oropharynx, hypopharynx, larynx, thyroid	*	*	*		*		*		*		Bedside
SECOND WEEK													
Monday	LARYNGO PHARYNGOLOGY HEAD & NECK	Foreign body aerodigestive tract, acute laryngitis, laryngotracheobronchitis Radiology of head & neck	*			*	*						SGD
Tuesday		History & examination, management	*	*	*			*	*		*		Bedside
Wednesday		Esophagoscopy, bronchoscopy, tracheostomy, laryngoscopy	*	*	*		*		*		*		OT
Thursday	WARD TEST(10 MCQ = 10 MARKS) (OSCE 10 STATIONS = 10X5 = 50 MARKS)												OSCE
Emergency duty from 2 to 4 pm in Emergency room, managing emergencies like tracheostomy, foreign body removal from throat, esophagus, bronchus ETC													

Community Oriented Clerkship module

4th year MBBS

Department of community medicine & public Health RMU

Theme (aim):

The primary purpose of this module is to educate students in those areas of the subject of CM&PH which are learnt better by onsite presence of the students at certain sites, processes, agencies which have public health relevance and in general community setting. Moreover some, areas of the subject which demands close interactive teachings in small group like HHS data analysis & report writing skills, contraceptive use skills, vaccination skills, etc are also covered during this rotation. All opportunities available within and outside the institution within affordable logistics, time, are focused for this purpose. A short time of this batch rotation is dedicated for health education communication practices as Health awareness work and other social work.

Learning outcomes (LOs):

at the end of this learning module students are expected to achieve following Public health Competencies as will be able to:

- 1. Undertake a population based health survey (HHS)*
- 2. Appreciate working of First level Care Facility (Public Sector)*
- 3. Perform Community Immunization / EPI vaccinations.*
- 4. Develop Hospital waste management plans.*
- 5. Develop Community based health awareness message.*
- 6. Communicate for Health awareness in community settings.*
- 7. Commemorate International public health days.*
- 8. Develop Hospital administration Plans.*
- 9. Undertake Preventive healthcare inquiries and NCDs Risk Factors Surveillance*
- 10. Counsel for the contraceptive devices to the community*

Module outline:

- *A batch comprising 20-22 students is posted in the department of CM & PH for a period of 2 weeks (Monday to Thursday-04 hrs. /day & for 32hrs in total). This schedule is run over the whole academic year, till all students of 4th year MBBS class passes through this rotation.*
- *Batch formation and schedules of rotation for whole class as notified by the DME / Student's section will be followed accordingly.*
- *At commencement of the academic year overall batch learning module coordinator, nomination of batch in-charges, senior faculty in charges and calendar schedule of batch rotation for all batches over the whole academic year will be notified by the Department of CM & PH.*

Domains of learning: *learning will occur in all the three domains C, A & P*

SOPs of Learning & Assessments:

- *Active participation will be graded by the batch in charge (under a check list) during the activity / session and grades/marks will be entered in the practical manual as out of 05 (Max marks 05) by the batch in charge. 05 Max Marks are reserved for CHC (HMDTD and Health awareness work.*
- *Assessment will be done by **OSPE / MCQs Exam / Viva voce** at the end of each module and credit will be objectively recorded for the purpose of internal assessment. (Max mark 10)*
- *General assessment of the subject learning will be through MCQs, SEQs & OSPE on the relevant subjects in the relevant end of modules, block exams and Send up Exams.*
- *Students are required to report / write the relevant work in Practical Journal, House Hold Survey Report Book and log all the clerkship activities in the Logbook on daily basis.*

Core Planner of Community Oriented Clerkship in the subject of Community Medicine (2 weeks batch rotation)

[Calendar schedule as notified by DME will be followed accordingly]

	Activity -I 10 – 11.00	Activity – II 10- 11.30am	Activity -III 10- 01.00pm	Activity -IV 10 – 2.00pm	Methods of teaching-learning	Assessment	Learning outcome (level of learning)
	Session topic	Session topic	Session topic	Session topic			
1 st day	Structuring / demonstration on Practical Manual based Assignments	<ul style="list-style-type: none"> Visit to CHC SGIS on Health days commemoration work, Display material, PPT. 	<ul style="list-style-type: none"> SGIS on HM-DTD practicum. Topic finalization, CHC-Message draft outlines finalization. 	<ul style="list-style-type: none"> PPT based Demo on How to conduct & report HHS. Guidelines on PHI work to be done during clinical rotations / ward duties 	<ul style="list-style-type: none"> Demonstration / lec -Hall 3 CHC -Dept CM NTB RMU. 	<ul style="list-style-type: none"> 1-2 OSPE in end of clerkship exam (credit will part of IA) Assessment of HHS -Report (Max marks:5 part practical /viva exam 4th Prof MBBS) 	<ul style="list-style-type: none"> Construct a health message. (C6) Prepare Health days commemoration stuff, Display material, PPT, (P) Undertake a health survey. (HHS) (C3)
2 nd day	Follow up session on HM-DTD work HHS work Health days commemoration work	S/ Briefing / PPT based guidelines on field visit of the day (EPI services center HFH)	Visit to the EPI center HFH	Health awareness work (HAW)	<ul style="list-style-type: none"> Demo Room, EPI Center HFH OPD, hospital shelters sites for health awareness work (HAW) 	<ul style="list-style-type: none"> 1-2 OSPE in end of clerkship exam (credit will part of IA) Grade of performance in EPI visit reporting. Credit of HAW 	<ul style="list-style-type: none"> Explain cold chain component at EPI center Vaccinate (EPI) vaccines to the clients Comprehend EPI system
3 rd day	Follow up session on HM-DTD work & HHS	S / Briefing / PPT based guidelines on FV to MCH & FP Services Center HFH	Visit to the MCH services & FP center HFH	Health awareness work (HAW)	<ul style="list-style-type: none"> FP Center HFH OPD, hospital shelters sites for HAW 	<ul style="list-style-type: none"> 1-2 OSPE in end of clerkship exam (credit will part of IA) Grade of performance in EPI visit reporting. Credit of HAW 	<ul style="list-style-type: none"> Identify CP devices available at MHC FP center Counsel clients for use of a contraception method Place CP devices to client (P)
4 th day	Follow up session on HM-DTD work & HHS	Briefing / guidelines on FV Hospital waste disposal system in hospitals	<ul style="list-style-type: none"> FV to the hospital waste disposal system & relevant sites / Incinerator 	Health awareness work (HAW)	<ul style="list-style-type: none"> FP Center HFH OPD, hospital shelters sites for HAW 	<ul style="list-style-type: none"> End of module OSPE Grade of performance in visits to sites 	<ul style="list-style-type: none"> Explain hospital waste disposal system Develop a hospital waste management plan Explains various domains of hospital management (C2)
5 th day (week 2)	S / PPT based briefing on Hospital management & administration	Visit to Hospital management & administration (HFH) office		Health awareness work (HAW)		<ul style="list-style-type: none"> End of module OSPE Grade of performance in visits to sites 	
6 th day	S / PPT based briefing on visit to First level of health care facility (FLCF) BHU/RHC	Field visit to RHC Khyaban Sir-Syed (RHC) or BHU		<ul style="list-style-type: none"> Demo room / lec Hall 3 NTB / CPC-Hall . RHC / BHU 	Health awareness work (HAW) at site visited	<ul style="list-style-type: none"> End of module OSPE Report credit in PJ 	<ul style="list-style-type: none"> Explain working of FLCF Appreciate PHC elements at FLCF. (C2)

7 th day	4th days commemoration (walk/ seminar/ presentation/ CHC-message dissemination work 10 – 12.00pm)	12.00 – 2.00pm <ul style="list-style-type: none"> Completion & assessment of relevant Practical Journal work, HHS-report book, Logbook etc. Feedback discussion on PHI 	<ul style="list-style-type: none"> Communication skills Comprehend frequency Preventable RFs of NCDs in the real population (RF surveillance) Undertake a preventive Healthcare inquiry
8 th day	Museum learning module (MLM) / visit to departmental Museum 10- 12.30	<ul style="list-style-type: none"> Endo of module OSPE (12.30 – 2.00pm) OPSE conduction (10 stations video assisted OPSE / OSPE) for 40 total marks . 	<ul style="list-style-type: none"> Completion of any remaining work journal assessment HHS report assessment Students feedback etc
<p style="text-align: center;">Community based / Field Visits</p> <p style="text-align: center;">Each batch will be perform at least 02 filed visits of sites of Public health importance outside the institutions under available opportunities and logistics. Following sites may be considered for the purpose.</p>			
	I. RHC Khiaban-e-Sir-Syed Rawalpindi / DHO II. Sewerage Treatment Plant I-8 Islamabad III. Water purification plant Rawal Dame Islamabad IV. Child protection Bureau Rawalpindi V. Community Livings / urban slums - US-15 Rawalpindi VI. National Vaccination production unit– Chuk Shahzad Islamabad VII. Vaccines & Venom Production Unit, NIH, Islamabad VIII. Clinical Trail Unit, NIH- Islamabad IX. Diseases Surveillance & control / SAAL office. NIH Islamabad X. WHO-Office, Chuk Shahzad, Islamabad XI. National Command & Operation Control Office (NCOC) / System. Disaster Control & Management office Islamabad XII. Office of Punjab Food Control Authority – Rawalpindi XIII. Drug intoxication & Rehabilitation center Dept of Psychiatry BBH Rawalpindi XIV. Any site appropriate & feasible for the purpose.	<p>Objectives: Students will better comprehend the System, Mechanism, or Processes (visited) of community health or public health relevance in regional practices context. (Practice based Learning)</p> <p>Feasibility, opportunity, and logistics: every visit will be planned subject to:</p> <ol style="list-style-type: none"> Approval of competent authority (RMU) in given conditions. Time space available (total 8 days rotation & with max 04 hrs. a day) Availability of Transport Consent / approval of f remote sites Another justified pre-visit approval/favor or fulfillment of need. 	

Note:

- Colander schedule of each batch will be noticed by the Department of community Medicine prior to the commencement of the batch rotation.
- Students will have to record all activities of the clerkship in the relevant Logbook accordingly. Students will keep logbook updated and duly signed by faculties & departments.

Department of Community Medicine & Public Health
Rawalpindi Medical University – Feb 2023

Date: 09th February, 2023 by DME, Main Campus

14.Learning Resources

Subject	Resources
Otorhinolaryngology	<ul style="list-style-type: none">• Diseases of ear nose and throat Dr Saleem Iqbal Bhutta• Scott Brown Otorhinolaryngology Head & Neck Surgery, Eighth Edition• Diseases of Ear, Nose and Throat & Head and Neck Surgery, Seventh Edition, PL Dhingra• Color Atlas of ENT diagnosis, Tony R. Bull, 5th Edition• Ear, Nose and Throat, Self-Assessment and Self Evaluation Manual, Second Edition, PL Dhingra
Community Medicine	<ul style="list-style-type: none">• Park's Textbook of Preventive and Social Medicine, 26th edition, Chapter 3, 4, 5• Textbook of Community Medicine by Muhammad Ilyas and Dr Irfanullah Siddiqi• Epidemiology by Leon Girdis

15.Time Table

Integrated Clinically Oriented Modular Curriculum for Fourth Year MBBS

Otorhinolaryngology Module Time Table

Fourth Year MBBS

Session 2023 – 2024

Module Name : **Otorhinolaryngology Module**

Duration of Module : **05 Weeks**

Coordinator : **Dr. Ashar Alamgir (Assistant Professor ENT)**

Module Committee		Module task force		
Vice Chancellor RMU	Prof. Dr. Muhammad Umar	Co Coordinator	Dr. Huma (PGT ENT HFH).	
Director DME	Prof. Dr. Rai Muhammad Asghar	DME Focal Person	Dr. Sidra Hamid	
Convener Curriculum	Prof. Dr. Naeem Akhter	Co-coordinator Comm Med	Dr. Imrana	
Chairperson Otorhinolaryngology	Prof Dr. Nousheen Qureshi			
Additional Director DME	Prof. Dr. Ifra Saeed			
Chairperson Physiology	Prof. Dr. Samia Sarwar			
Chairperson Biochemistry	Dr. Aneela Jamil	DME Implementation Team		
		Director DME		Dr. Rai Muhammad Asghar
Focal Person ENT 4 th YearMBBS	Dr Huma	Implementation In charge 4 th Year MBBS		Prof. Dr. Arshad Ali Sabir
Focal Person Comm Med	Dr. Affifa Kalsoom	Deputy Director DME		Dr. Shazia Zeb

Categorization of Modular Content of Otorhinolaryngology		
Category A* By Professors	Category B** By Assoc & Assist Prof	Category C By Senior Registrars
Endoscopic anatomy of middle ear	Anatomy and physiology of ear and vestibular system	Chronic Otitis media
Types of mastoidectomies	Acute Otitis externa & Malignant Otitis externa	Snoring and Sleep Apnoea
FESS	Acute Otitis Media /Otitis media with effusion + Eustachian tube catarrh	Vasomotor Rhinitis and its differentials
	Facial nerve palsy	Pure tone audiometry, Tympanometry and BERA/ASSR
	Otosclerosis	Hearing Aids, Cochlear implant
	Sensorineural hearing loss, noise induced hearing loss, drug induced HL, Meniere's	Nasal polyps
	Acute epiglottitis, Acute laryngotracheobronchitis	Allergic rhinitis
	Complications of Chronic Otitis media	Radiology of nose and paranasal sinuses
	Nasopharyngeal Angiofibroma	Anatomy and physiology of oral cavity, pharynx
	Deviated nasal septum & Rhinoplasty	Septal abscess & septal hematoma
	Complications of rhinosinusitis	Basal cell carcinoma & Squamous cell carcinoma Nose
	Acute and chronic tonsillitis, peritonsillar abscess, retropharyngeal abscess, parapharyngeal abscess	Anatomy and physiology of larynx, trachea, bronchi
	Vocal nodule, vocal polyp, Rienke's edema	Adenoiditis
	Diseases of salivary glands	Ludwigs angina

Teaching Staff / Human Resource of Department of Otorhinolaryngology

Sr. #	Designation Of Teaching Staff / Human Resource	Total number of teaching staff
1.	Professor	01
2.	Associate professors	02
3.	Assistant professors	03
4.	Senior Registrars	02

Contact Hours (Faculty)

Sr. #	Hours Calculation for Various Type of Teaching Strategies	Total Hours
1.	Large Group Interactive Session (LGIS)	$2 * 13 = 26$ hours
2.	Small Group Discussions (SGD)	$2*12+ 1*2=26$ hours
3.	Case Based Learning (CBL)	$2 * 2 = 4$ hours
4.	Operation theatre	$4 * 8 = 32$ hours

CATEGORIZATION OF MODULAR CONTENT OF COMMUNITY MEDICINE DEPARTMENT

Category A*	Category B**	Category C***		
LGIS	LGIS	SDGS	SDL	IUGRC SESSIONS (PAL)
Epidemiology Fundamental concepts	Concept of to disease & health	Measures of morbidity & exercise of morbidity statistis		Selection of research title (Finer Criteria) & literature review
Quantification of ill health & death	Concept of disease causation	Measures of mortality & exercise of morality statistis		
Epidemiological Study designs	Levels of prevention			
Measure of association in epidemiological data analysis				
Epidemiological investigation	Health dimensions & indicators	Calculation of indicators & indexes	Exercise of Investigation of epidemics	
Disease Causation & association concepts	Epidemiology of Communicable diseases			
Overview of Health research methods				
Research Sampling techniques				

Category A*: Fundamental & Complex Concepts taken by Professors, Associate Professors and Assistant Professors

Category B**: Intermediate concepts. Exercises. By Professorial faculty and Senior Demonstrators/ subject specialists.

Category C***: Relatively lower complex concepts, exercises/ applications. By Assistant professors, Demonstrators & senior PGTs)

Teaching Staff / Human Resource of Department of Community Medicine

Sr.no.	Designation	Total number of teaching staff
1	Professor	01
2	Associate professor	02
3	Assistant professor	02
4	demonstrators	05
5	PGTs	04

Contact Hours (Faculty)

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty)	Total Hours (Students)	Faculty level
1	LGIS (17). 1hrs each session (half class sessions)	2 x 17= 34 hrs.	17	Professor, associate, and assistant professors
2	SGD (2) approx. 2hrs each session. 1/4 th class	2 x 8= 16 hrs.	4	Demos (subject specialists), Senior PGTs
3	PAL (IUGRC) (1) approx. 2hrs per session. (16 small group sessions. 8 sessions per day)	2 x 16 =32 hrs.	2	Demos (subject specialists) supervised by professional faculties
4	SDL (1)	1 x 4 =2 hrs.	2	Demos (subject specialists)
		Total: 84hrs	25hrs	

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK
TENTATIVE TIME TABLE 4th YEAR MBBS – OTORHINOLARYNGOLOGY MODULE 2023

(FIRST WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am	BREAK 10:00AM – 10:30AM	10:30am – 12:00pm	12:00pm - 02:00pm				
Monday 06-03-23	ENT (EVEN/ODD) LGIS	COMMUNITY MEDICINE (EVEN/ODD) LGIS		SGD	CBL				
	Endoscopic anatomy of middle ear Dr Nausheen/ Dr Ashar Lec hall 1 & 2	Introduction to the subject (fundamental concepts and scheme of learning) Prof Arshad Sabir Lec hall 1& 2		Discuss anatomy of ear and vestibular system in ENT wards class room	Ear examination in ENT wards on patients				
Tuesday 07-03-23	ENT LGIS	COMMUNITY MEDICINE LGIS		SGD	CBL				
	Anatomy and physiology of ear and vestibular system Dr Ahmad Hassan/Dr Arshad Lec hall 1& 2	Introduction to disease and health-I(epidemiological triad) Dr Gul Mehar AP/Dr Imrana S.Demo Lec hall 1& 2		Discuss physiology of ear and vestibular system in ENT ward class room	Examination of hearing and vestibular system on patients in ENT ward				
Wednesday 08-03-23	ENT LGIS	PHARMACOLOGY LGIS		SGD	CBL				
	Acute Otitis externa Malignant Otitis externa Dr Nausheen/Dr Sundas Lec hall 1& 2	Antihistamines Dr Omaima Lec hall 1 & 2		Discuss acute otitis externa Malignant otitis externa in ENT ward class room	History and examination of Acute otitis externa Malignant otitis externa patients in ENT ward				
Thursday 09-03-23	ENT LGIS	COMMUNITY MEDICINE LGIS	SGD	CBL					
	Acute Otitis Media /Otitis media with effusion + Eustachian tube catarrh Dr Ahmad Hassan/Dr Arshad Lec hall 1& 2	Fundamental concepts of Epidemiology-I Prof Arshad Sabir Dr. Sana Bilal Asse Prof Lec hall 1 & 2	Discuss otitis media with effusion Eustachian catarrh in ENT ward class room	History and examination of Otitis media with effusion Eustachian catarrh patients in ENT ward					
Friday 10-03-23	08:00AM – 09:45AM	09:45AM – 10:30		10:30AM – 11:15AM	11:15AM – 12:00PM	SDL			
	VISIT	ENT LGIS		COMMUNITY MEDICINE LGIS		LGIS-ENT			
	Community medicine / Pharmacology HRM (Contact session) R1/ Overview to health research methodology(SGD) Prof Arshad Sabir/ Dr. Sana Bilal Asse Prof. Effect of histamine and anti histamine on rabbit’s ileum Dr Uzma / Dr Arsheen	Chronic Otitis media Dr Sadia Lec hall 4	Chronic Otitis media Dr Nida Lec hall 5	Health and Disease II Positive health and Dimensions of health (health indices)		Snoring and Sleep Apnoea Dr Nida/Dr Sundas Lec hall 4 & 5			
				Dr. Gul Mehar AP hall 4	/Dr. Imrana S.Demo hall 5				
Saturday 11-03-23	08:00AM – 09:45AM	09:45AM – 10:30		10:30AM – 11:15AM		BREAK 11:15AM – 11:45AM	11:45AM – 12:30PM	12:30PM – 01:15PM	01:15PM – 02:00PM
	VISIT (SGD)	ENT LGIS		COMMUNITY MEDICINE LGIS			ENT LGIS	Pathology LGIS	SDL-ENT
	Community medicine / Pharmacology HRM (Contact session) R1/ Overview to health research methodology Dr. Khola Asse Prof/ Dr.Afifa AP Effect of histamine and anti histamine on rabbit’s ileum Dr Uzma / Dr Arsheen	Facial nerve palsy Dr Nida Lec hall 4	Facial nerve palsy Dr Sundas Lec hall 5	Natural history of disease and levels of prevention-III Dr. Gul Mehar AP/ Dr. Imrana S.Demo Hall 4 & 5			Otosclerosis Dr Ashar / Nida Lect Hall 4 & 5	Cysts, polyp, cholesteatoma and neoplastic lesions of ear Dr Abid / Dr Mudassira Lec Hall 4 & 5	Vasomotor Rhinitis and its differentials Dr Nida Lect hall 4 & 5
		Odd	Even						

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK
TENTATIVE TIME TABLE 4th YEAR MBBS – OTORHINOLARYNGOLOGY MODULE 2023

(SECOND WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am		10:30am – 12:00pm		12:00pm - 02:00pm				
Monday 13-03-23	ENT LGIS	COMMUNITY MEDICINE LGIS		BREAK 10:00AM – 10:30AM	SGD	CBL				
	Pure tone audiometry, Tympanometry and BERA / ASSR Dr Ashar/Dr Sadia Lec hall 1 & 2	Introduction to Epidemiological Methods-II Prof Arshad Sabir/ Dr Sana Bilal Asse Prof Lec Hall 1 & 2			Discuss chronic otitis media and management in ENT ward class room	Management of otitis media in ENT wards on patients				
Tuesday 14-03-23	ENT LGIS	COMMUNITY MEDICINE LGIS			SGD	CBL				
	Sensorineural hearing loss, noise induced hearing loss, drug induced HL, Meniere’s Dr Sadia /Dr Haitham Lec Hall 1 & 2	Analytical Epidemiology-III (case control study) Prof Arshad Sabir/ Dr Sana Bilal Asse Prof Lect Hall 1 & 2			Discuss different types of hearing loss and their management in ENT ward class room	Examination of hearing and vestibular system on patients and interpretation in ENT ward				
Wednesday 15-03-23	ENT LGIS	OBSTETRICS			SGD	CBL				
	Hearing Aids, Cochlear implant Dr.Nida/Dr Arshad Lec Hall 1 & 2	Preparation to go to obs ward Dr Humera Noreen Lec hall 1 & 2			Discuss causes of otalgia and referred otalgia in ENT ward class room	History and examination of patients with otalgia in ENT ward				
Thursday 16-03-23	ENT LGIS	COMMUNITY MEDICINE LGIS			SGD	CBL				
	Anatomy and physiology of nose and paranasal sinuses Dr Ahmad Hassan/DrHaitham Lec hall 1 & 2	Epidemiology-IV (cohort study) Prof Arshad Sabir/Dr Sana Bilal Asse Prof Lec Hall 1 & 2			Discuss different types of mastoidectomies in ENT ward class room	Demonstration of mastoidectomy patients in ENT operation theatre				
Friday 17-03-23	08:00AM – 09:45AM	09:45AM – 10:30		10:30AM – 11:15AM		11:15AM – 12:00PM		SDL		
	VISIT	ENT LGIS		COMMUNITY MEDICINE LGIS		PATHOLOGY LGIS				
	Community medicine / Pharmacology HRM (Contact session) -I/ (PAL) Selection of Research title FINER criteria All demonstrators CMED department Prescription writing on allergic rhinitis	Acute epiglottitis, Acute laryngotracheobronchitis Dr Sadia Lec Hall 4	Acute epiglottitis, Acute laryngotracheobronchitis Dr Ashar Lec hall 5	Droplet Infections-I(smallpox,chickenpox ,measles) Dr. Narjis(S.Demo) Lec hall 4	Droplet Infections-I(smallpox,chickenpox ,measles) Dr Memona (S.Demo) Lect hall 5	Oral inflammatory lesions and neoplastic lesions, pathologies of tonsils Dr Abid / Dr Mudassira Lecture hall 4 & 5	Acute otitis media/Chronic otitis media / Cholesteatoma			
		Even	Odd	Odd	Even					
Saturday 18-03-23	08:00AM – 09:45AM	09:45AM – 10:30		10:30AM – 11:15AM		BREAK 11:15AM – 11:45AM		11:45AM – 12:30PM		12:30PM – 01:15PM
	VISIT	ENT LGIS		ENT LGIS			COMMUNITY MEDICINE LGIS		OBSTETRICS	SDL
	Community medicine / Pharmacology HRM (Contact session) -I/ (PAL) (Selection of Research title FINER criteria. All demonstrators Cmed department Prescription writing on allergic rhinitis	Complications of Chronic Otitis media Dr Ahmad Hasan Lec hall 4	Complications of Chronic Otitis media Dr Haitham Lec hall 5	Types of mastoidectomies Dr Sundas/ Arshad Lec Hall 4 & 5			Droplet Infections-II(rubella, pertussis,mumps) Dr.Narjis/Dr.Asif(S.Demo) Lec Hall 4 & 5	History taking and examination of obs patients Prof Tallat Farkhanda Lec Hall 4 & 5	Laser and cryosurgery in otorhinolaryngology Dr Nida Lec Hall 4 & 5	
		Odd	Even							

Date: 9th March, 2023 by DME, Main Campus

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK
TENTATIVE TIME TABLE 4th YEAR MBBS – OTORHINOLARYNGOLOGY MODULE 2023

(THIRD WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am		10:30am – 12:00pm		12:00pm - 02:00pm	
	ENT LGIS	COMMUNITY MEDICINE LGIS		SGD		CBL	
Monday 20-03-23	Nasopharyngeal Angiofibroma Dr Ashar/Dr Sadia Lec hall 1 & 2	Experimental epidemiology -V (RCTs) Prof Arshad Sabir/Dr Sana Bilal Lec Hall 1 & 2		Discuss anatomy and physiology of nose and paranasal sinuses in ENT wards		History taking and Nose and PNS examination in ENT wards on patients	
	ENT LGIS	COMMUNITY MEDICINE LGIS		SGD		CBL	
Tuesday 21-03-23	FESS Dr Haitham/Dr Ashar Lec Hall 1 & 2	Non probability Sampling Dr.Khola Asse Proff/ Dr.Afifa AP Lec Hall 1 & 2		Discuss DNS, Angiofibroma in ENT ward		Septoplasty, SMR, FESS on patients	
	ENT LGIS	COMMUNITY MEDICINE LGIS		SGD		CBL	
Wednesday 22-03-23	Deviated nasal septum & Rhinoplasty Dr Nida/Dr Arshad Lec hall 1 & 2	Probability Sampling Dr.KholaAsse Proff/ Dr.Afifa AP Lect hall 1&2		Discuss Rhinoplasty in ENT ward		H patients in ENT ward	
	ENT LGIS	COMMUNITY MEDICINE LGIS		SGD		CBL	
Thursday 23-03-23	Acute and chronic Rhinosinusitis Dr Ahmad Hassan/Dr Sadia Lec hall 1 & 2	Comparison of all study designs-VI Prof Arshad Sabir/Dr Sana Bilal Asse Prof Lecture hall 1&2		Discuss acute and chronic rhinosinusitis		Demonstrate acute and chronic sinusitis on patients in ENT ward	
Friday 24-03-23	08:00AM – 09:45AM	09:45AM – 10:30		10:30AM – 11:15AM	11:15AM – 12:00PM	SDL	
	SGD CM/Pathology	ENT LGIS		Community Medicine LGIS	DERMATOLOGY		
	Community medicine / Pathology Measures of morbidity Dr.Gul Mehar, Dr.Abdul Qudoos, Dr.Zaira,Dr.Moniba Inflammatory/allergic nasal polyps, cholesteatoma, squamous cell Carcinoma, Nasal polyps Dr Fatima / Dr Saeed	Nasal polyps Dr Sadia Lec hall 4	Nasal Polyps Dr Nida Lec hall 5	Droplet Infection – III(diphtheria, meningitis,influenz) Dr.Narjis(S.Demo) Lecture Hall 4	Droplet Infection – III(diphtheria, meningitis,influenz) Dr.Memona(S.Demo) Lecture Hall 5	Septal abscess & Septal hematoma Radiology of nose and paranasal sinuses Vocal cord paralysis	
		Odd	Even	Odd	Even		
Saturday 25-03-23	08:00AM – 09:45AM	10:00AM – 11:00AM		11:00AM – 11:40AM	11:40AM – 12:20PM	12:20PM – 01:00PM	
	SGD CM/Pathology	ENT LGIS		COMMUNITY MEDICINE LGIS	ENT LGIS	DERMATOLOGY LGIS	
	Community medicine / Pathology Measures of morbidity Dr.Gul Mehar, Dr.Abdul Qudoos, Dr.Zaira,Dr.Moniba Nasal polyps, Neoplasms of nasopharynx, Nasal polyps Dr Fatima / Dr Saeed	Complications of rhinosinusitis Dr Sundas Lec hall 4	Complications of rhinosinusitis Dr Haitham Lec hall 5	Droplet Infections _IV Tuberculosis Dr. asif / Dr. Narjis(S.Demo) Lec hall 4 & 5	Allergic rhinitis Dr Sundas/Dr Haitham Lec hall 4 & 5	Approach to a patient with Acne & Melasma Dr Shahwana Lec Hall 4 & 5	MID MODULE ASSESSMENT MCQ PAPER
		Odd	Even				

Date: 9th March, 2023 by DME, Main Campus

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RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK
TENTATIVE TIME TABLE 4th YEAR MBBS – OTORHINOLARYNGOLOGY MODULE 2023

(FOURTH WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00AM – 10:00AM		10:00AM – 11:30AM		11:30AM - 01:00PM		
Monday 27-03-23	ENT LGIS	ENT LGIS		NO BREAK	SGD		CBL	
	Radiology of nose and paranasal sinuses Dr Haitham/Dr Ashar Lec hall 1 & 2	Anatomy and physiology of oral cavity, pharynx Dr Sadia/Dr Ahmad Hassan Lec Hall 1 & 2			Discuss radiology of Nose and PNS in ENT wards		History taking, examination of oral cavity, pharynx in ENT wards on patients	
Tuesday 28-03-23	ENT LGIS	ENT LGIS			SGD		CBL	
	Septal abscess & septal hematoma Dr Ashar /Dr Sadia Lec hall 1 & 2	Basal cell carcinoma &Squamous cell carcinoma Nose Dr Haitham/Dr Ahmad Hassan Lec hall 1 & 2			Discuss septal abscess, septal hematoma in ENT ward		Demonstrate septal hematoma, septal abscess, Basal cell carcinoma, squamous cell carcinoma on patients in ENT ward	
Wednesday 29-03-23	ENT LGIS	COMMUNITY MEDICINE LGIS			SGD		CBL	
	Anatomy and physiology of larynx, trachea, bronchi Dr Nida /DrArshad Lec hall 1 & 2	Association and Causation-VII Prof Arshad/Dr.Sana Bilal Lec hall 1 & 2			Discuss anatomy and physiology of larynx, trachea, bronchi in ENT ward		History taking, examination of larynx, trachea, bronchi, neck on patients in ENT ward	
Thursday 30-03-23	ENT LGIS	COMMUNITY MEDICINE DSL			SGD		CBL	
	Acute and chronic tonsillitis, peritonsillar abscess, retropharyngeal abscess, parapharyngeal abscess Dr Ashar/Dr Sundas Lec hall 1 & 2	Investigation of epidemic Prof Arshad/Dr.Sana Bilal Lec hall 1 & 2			Discuss acute, chronic tonsillitis, peritonsillar abscess, retropharyngeal abscess, parapharyngeal abscess in ENT ward		Demonstrate acute, chronic tonsillitis, peritonsillar abscess, retropharyngeal, parapharyngeal abscess on patients in ENT ward	
Friday 31-03-23	08:00AM – 09:40AM	09:45AM – 10:30AM		10:30AM – 11:15AM		11:15AM – 12:00PM		SDL
	SGD CM/Pathology	ENT LGIS		DERMATOLOGY LGIS		ENT LGIS		
	Community medicine / Pathology HRM (Contact session) R1/ Epidemiologic aspects of diphtheria, pertussis, meningococcal meningitis, influenza, SARS, tuberculosis, pneumonia, Neoplastic lesions of nasopharynx	Adenoiditis Dr Sadia Lec hall 4	Adenoiditis Dr Haitham Lec hall 5	Approach to a patient with Lichen Planus Dr Shahwana Lec hall 4	Approach to a patient with Lichen Planus Lec Hall 5	Vocal nodule, vocal polyp, Rienke’s edema Dr Sundas / DrArshad Lec hall 4 & 5	Study about adenoiditis, its clinical features, investigations and management Salivary gland diseases, their diagnosis, investigations and management	
		Odd	Even	Odd	Even			
Saturday 01-04-23	08:00AM – 09:45AM	10:00AM – 11:00AM		11:00AM – 12:00PM		NO BREAK	12:00PM – 01:00PM	SDL
	SGD CM /Pathology	ENT LGIS		ENT LGIS			DERMATOLOGY LGIS	
	HRM (Contact session) R1/ Dr.Gul Mehar, Dr.Abdul Qudoos,Dr.Zaira,Dr.Moniba Epidemiologic aspects of diphtheria, pertussis, meningococcal meningitis, influenza, SARS, tuberculosis, pneumonia, Neoplastic lesions of nasopharynx	Ludwigs angina Dr Ahmad Hassan Lec Hall 4	Ludwigs angina Dr Sundas Lec hall 5	Diseases of salivary glands Dr Sundas/ Arshad Lec Hall 4 & 5			Approach to a patient with Cutaneous Drug Reactions Dr Shahwana Lec hall 4 & 5	Vocal cord paralysis Radiology of neck and aerodigestive tract Dr Nida
		Odd	Even					

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK
TENTATIVE TIME TABLE 4th YEAR MBBS – OTORHINOLARYNGOLOGY MODULE 2023

(FIFTH WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00AM – 10:00AM		10:00AM – 11:30AM	11:30AM - 01:00PM
	ENT SDL	ENT SDL		SGD	CBL
Monday 03-04-23	Revision Ear Diseases Dr Nida	Revision Throat diseases Dr Sundas		Revision of history taking, investigations	Revision nose, throat, neck examination
	ENT SDL	ENT SDL		SGD	CBL
Tuesday 04-04-23	Revision Nose Diseases Dr Nida	Revision Head and Neck diseases Dr Sundas		Revision of radiology of ear, nose, throat	Revision Examination of hearing and vestibular system on patients in ENT wards
Wednesday 05-04-23	EXAM PREPARATION LEAVE			EXAM PREPARATION LEAVE	
Thursday 06-04-23	EXAM PREPARATION LEAVE			EXAM PREPRATAION LEAVE	
Friday 07-04-23	END OF BLOCK / MODULE - WRITTEN PAPER (MCQ+SAQ) MCQ 09 AM TO 10 AM SAQ 10 AM TO 11 AM				
Saturday 08-04-23	END OF BLOCK / MODULE – OSPE 09 AM TO 11 AM				

16.Research

Cultivating the culture of Research has always been envisioned as one of the main pillars of Rawalpindi Medical University, as a means to develop healthcare professionals capable of contributing to the development of their country and the world. For the purpose thereof, right from the inception of Rawalpindi Medical University, efforts were concentrated to establish a comprehensive framework for research in Rawalpindi Medical University, as a matter of prime importance. With team efforts of specialists in the field of research, framework was made during the first year of the RMU, for the development and promotion of Research activities in RMU, called the Research Model of RMU, giving clear scheme and plan for establishment of required components for not only promoting, facilitating and monitoring the research activities but also to promote entrepreneurship through research for future development of RMU itself.



17. Biomedical Ethics

Ethical choices, both minor and major, confront us everyday in the provision of health care for persons with diverse values living in a pluralistic and multicultural society.

Four commonly accepted principles of health care ethics, excerpted from Beauchamp and Childress (2008), include the:

1. Principle of respect for autonomy,
2. Principle of nonmaleficence,
3. Principle of beneficence, and
4. Principle of justice.

18. Family Medicine

Family Medicine is the primary care medical specialty concerned with provision of comprehensive health care to the individual and the family regardless of sex, age or type of problem. It is the specialty of breadth that integrates the biological, clinical and behavioural sciences. Family physicians can themselves provide care for the majority of conditions encountered in the ambulatory setting and integrate all necessary health care services.

19. Artificial intelligence

Artificial intelligence in medicine is the use of machine learning models to search medical data and uncover insights to help improve health outcomes and patient experiences. Artificial intelligence (AI) is quickly becoming an integral part of modern healthcare. AI algorithms and other applications powered by AI are being used to support medical professionals in clinical settings and in ongoing research. Currently, the most common roles for AI in medical settings are clinical decision support and imaging analysis.

Annexure

(Sample MCQ & SAQ papers)

Sample Of MCQs paper

Rawalpindi Medical University - Send Up 4th Year MBBS 2022 (Otolaryngology Module)

Department of Otorhinolaryngology
Holy Family Hospital
SEND UP ENT MODULE 4TH YEAR MBBS 2022
WRITTEN EXAMINATION

In charge: Prof Nousheen Qureshi
Coordinator: Dr Ashar Alamgir

Total marks: 55 Total time: 60 minutes
Attempt all questions. All questions carry equal marks.
ENT = 35 Comm Medicine = 20
1. A young boy was involved in road traffic accident. He developed vertigo when he tried to move about. On examination he had blue ear drum and facial palsy on right side. Audiogram done two weeks later confirmed sensorineural hearing loss. The likely diagnosis is:

- a. Transverse fracture of temporal bone*
- b. Longitudinal fracture of temporal bone
- c. Ossicular chain disruption
- d. Disruption of spiral ganglion
- e. Brain contusion

2. A two year old child is suffering from acute otitis media. His pain is not relieved in spite of adequate treatment. The best treatment in this situation is:

- a. Change antibiotic
- b. Increase analgesic dose
- c. Do hot fomentation
- d. Give lignocaine ear drops
- e. Do myringotomy*

3. The posterior meatal wall is left intact in:

- a. Cortical mastoidectomy*
- b. Modified radical mastoidectomy
- c. Radical mastoidectomy
- d. Fenestration operation
- e. Extended radical mastoidectomy

4. The patient complains of reduced hearing. The tuning fork test show negative Rinne test on right side and Weber test lateralizing to same side. This means:

- a. Conductive deafness on right side*
- b. Perceptive deafness on right side
- c. Sensorineural deafness on right side
- d. Cochlear hydrops on right side
- e. Cochlear otosclerosis on right side

5. On otoscopic examination of a patient with complaints of itching and pain in the ear, black spores are seen along with debris in the ear canal. Which organism was responsible for patients otomycosis :

- a. Aspergillus Niger*
- b. Aspergillus Flavus
- c. Aspergillus Alba

- d. Candida Albicans
 - e. Aspergillus Fumigatus
6. A 20 year old boy presented in OPD with swelling behind the right ear for five days. The swelling was preceded by discharge from the same ear for 3 weeks along with occasional pain behind the ear. On examination there was erythema behind right pinna with protrusion of right pinna. The diagnosis in this patient was:

- a. Bezold Abscess
- b. Preauricular Abscess
- c. Subperiosteal Abscess*
- d. Pharyngeal Abscess
- e. Luc's abscess

7. Commonest organism causing malignant otitis externa is:

- a. Proteus
- b. Pseudomonas*
- c. Streptococcus Pyogenes
- d. Streptococcus Pneumonia
- e. Bacteroides

8. The patient had discharging ear. He was put on some antibiotics ear drops. He self-medicated with these drops for a long time. Now he complains of reduced hearing. Audiogram shows sensorineural hearing loss. Which drug is responsible for his hearing loss?

- a. Erythromycin
- b. Gentamycin*
- c. Streptomycin
- d. Neomycin
- e. Clindamycin

9. A patient presents with decreased hearing since 1 month. Tuning fork tests were done. There was conductive deafness in the patient. Which of the following conditions will present with conductive deafness?

- a. Presbycusis
- b. Meniere's disease
- c. Vestibular schwannoma
- d. Otosclerosis*
- e. Noise induced hearing loss

10. A 25 year old female patient presented with unilateral hearing loss. Schwartz sign was positive. Patient was diagnosed with conductive hearing loss due to otosclerosis. How will you manage the patient:

- a. Stapedotomy*
- b. Grommet insertion
- c. Myringoplasty
- d. Observe
- e. Sodium fluoride

11. A two year old child is having unilateral nasal discharge which is foul smelling and purulent. The likely diagnosis is:

Sample of SAQ paper

Rawalpindi Medical University - Department of Otorhinolaryngology, Holy Family Hospital, Rawalpindi

RAWALPINDI MEDICAL UNIVERSITY

4TH YEAR SEND UP OTORHINOLARYNGOLOGY MODULE (Y4M1)

Date:	00-00-2022	Total SAQs:	10	Total marks:	50	Time allocated:	60 minutes
ENT	07	COMM MED	03				

Attempt all questions. All questions carry equal marks.

1. A 16 years old male presents with history of pain in throat and fever for last one week and difficulty in swallowing for last 2 days. Examination shows swelling of right soft palate and uvula was shifted to left side. Complete blood count showed neutrophilia.

a. What is the most probable diagnosis and what is causative organism?

a. 2

b. Write management steps for this case.

b. 2

c. What is interval tonsillectomy?

c. 1
2. A 45 years old male, singer by profession and chronic smoker presented with history of hoarseness of voice from last 1 month. Indirect laryngoscopy showed small polypoidal growths involving bilateral anterior two third of vocal cords.

a. Write down your diagnosis.

a. 1

b. Briefly write management options.

b. 2

c. What preventive measure should be taken to avoid further worsening of voice?

c. 2
3. A 15 year old boy presented with complaints of right sided progressive nasal blockage and on & off profuse epistaxis from last 3 months. Examination revealed a fleshy mass filling right nostril. CT scan nose & paranasal sinuses showed a homogenous opacification involving right nasal cavity and invading the pterygopalatine fossa.

a. Write down your diagnosis?

a. 1

b. How will you investigate?

b. 2

c. What are different surgical approaches in this case?

c. 2
4. A patient of age 37 year presented in ENT OPD with history of nasal obstruction, nasal discharge and anosmia for past 6 month . On anterior rhinoscopy pale glistening masses were seen in both nasal cavities.

a. What is most likely diagnosis?

a. 1

b. What investigations can be helpful in this disease?

b. 2

c. Briefly write management plan.

c. 2
5. A 20 year old girl presented to ENT OPD after ear piercing with red, hot, painful pinna which on examination feels stiff.

a. Write down your diagnosis.

a. 1

b. What are the complications if left untreated?

b. 2

c. What is your management plan?

c. 2
6. A 7 year old child presented to ENT Emergency with pain behind the ear, fever and ear discharge for two days. On examination pinna is pushed downward and forward with congestion over the mastoid.

a. Pen down your diagnosis?

a. 1

b. Enumerate important investigations.

b. 2

c. Write steps of management plan.

c. 2
7. A 50 years old male, smoker from the last 30 years presented to ENT OPD with complaints of hoarseness of voice for 6 months and dysphagia from 3 months. On examination there is a mass seen in glottic area causing fixation of vocal cords with palpable neck nodes.

a. What is most likely diagnosis?

a. 1

b. Write investigations to reach final diagnosis.

b. 2

c. What is your management plan?

c. 2
8. A retrospective study was done among 2000 individuals (1000 from each group) in order to determine the association of obesity with life style (sedentary / healthy). About 770 cases and 230 controls were observed to have sedentary life style.

a. Draw 2 ×2 (contingency) table.

a. 2

b. Calculate relevant measure of association.

b. 2

c. Interpret the results.

c. 1
9. Covid-19 has produced devastating effects on lives of people over the Globe. Public health has emerged as an important and effective science in protecting and promoting health of the people. Considering Covid-19 pandemic and public practices answer following.

a. Explain primary and secondary levels of prevention practices in wave of covid-19.

a. 3

b. Explain 04 dimensions of health embodied in WHO definition of Health.

b. 2
10. A research was intended for risk assessment of type-II diabetes among adult people residing in Wah Cantt. Population of adults was stratified with respect to their age into five groups.

a. Explain which type of sampling will be appropriate, how it will be accomplished and what would be its benefits in the above scenario?

a. 4

b. Explain concept of "Snow ball" sampling.

b. 1

----- THE END -----



Fourth Year MBBS 2023

Study Guide

Ophthalmology Block

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- University Moto, Vision, Values& Goals

RMU Motto



Mission Statement

To impart evidence-based research-oriented health professional education in order to provide best possible patient care and inculcate the values of mutual respect, ethical practice of healthcare and social accountability.

Vision and Values

Highly recognized and accredited centre of excellence in Medical Education, using evidence-based training techniques for development of highly competent health professionals, who are lifelong experiential learner and are socially accountable.

Goals of the Undergraduate Integrated Modular Curriculum

The Undergraduate Integrated Learning Program is geared to provide you with quality medical education in an environment designed to:

- Provide thorough grounding in the basic theoretical concepts under pinning the practice of medicine.
- Develop and polish the skills required for providing medical services at all levels of the Healthcare delivery system.
- Help you attain and maintain the highest possible levels of ethical and professional conduct in your future life.
- Kindle a spirit of inquiry and acquisition of knowledge to help you attain personal and professional growth & excellence.

Ophthalmology Module

Ophthalmology system- based module, as part of an outcome- based, integrated curriculum keeping in view the approach suggested by Harden.

Curriculum partially represents constructivist perspective and partially behavioral perspective. Behavioral approach begins with educational plans that start with the setting of goals or objectives. These are the important elements in curriculum implementation, as evaluating the learning outcomes will mean the change in behavior. The change of behavior indicates the measure of the achievement.

Constructivist approach leads to learning that proceeds in spiraling fashion including laddering, scaffolding, weaving, and dialogism. The utilization of constructivism in educational settings has been shown to promote higher-order thinking skills such as problem-solving and critical thinking. Students will construct their new knowledge based on what they already know. This knowledge will be used in purposeful activities like making judgments and decisions.

- Ophthalmology Module Team

Module Committee		
1.	Vice Chancellor	Prof. Dr. Muhammad Umar (SI)
2.	Director DME	Prof. Dr. Rai Muhammad Asghar
3.	Convener Curriculum	Prof. Dr. Naeem Akhter
4.	Dean Basic Sciences	Prof. Dr. Ayesha Yousaf
5.	Additional Director DME	Prof. Dr. Ifra Saeed
6.	Chairperson Ophthalmology	Prof Fuad A.K Niazi
7.	Chairperson Community Medicine	Prof. Dr. Arshad Sabir
8.	Focal Person Ophthalmology	Dr. Sidra Jabeen
9.	Focal Person Community Medicine	Dr. Sana Bilal

Module Task force team		
1.	Coordinator	Dr. Sidra Jabeen (AP Ophthalmology)
2.	DME focal person	Dr. Maryam Batool
DME implementation Task Force		
1.	Director DME	Prof. Dr. Rai Muhammad Asghar
2.	Add. Director DME	Dr. Asma Khan
3.	Assistant Director	Dr Oaima Asif
4.	Module planner & Implementation coordinator	Dr. Oaima Asif
5,	Editor	Mr. Ahmed Rafay Dr. Oaima Asif

- Ophthalmology Module

Introduction: Ophthalmology module provides integration of core concepts that underlie the foundation of basic sciences and their use in clinical medicine. This will eventually lead to develop critical thinking for integration and application of basic knowledge for clinical application.

Rationale: The module is designed to impart basic knowledge about ophthalmic pathology, pharmacology, Community Medicine, bioethics, Research, Medicine & Surgery. This knowledge will serve as a base on which the student will construct further knowledge about the etiology, pathogenesis and prevention of diseases; the principles of their therapeutics and management.

Module Outcomes

Each student will be able to:

Knowledge

Acquire knowledge about the basic terminologies used in Pharmacology, Pathology & Forensic Medicine as well as the concepts of diseases in the community

- Use technology based medical education including Artificial Intelligence.
- Appreciate concepts & importance of Family Medicine, Biomedical Ethics, Artificial intelligence and Research.

Skills

Interpret and analyze various practicals of Pre-clinical Sciences

Attitude

- Demonstrate a professional attitude, team building spirit and good communication skills

This module will run in 5 weeks duration. The content will be covered through introduction of topics. Instructional strategies are given in the time table and learning objectives are given in the study guides. Study guides will be uploaded on the university website. Good luck!

Section I- Terms & Abbreviations

Contents

- Domains of Learning
- Teaching and Learning Methodologies/ Strategies
 - Large Group Interactive Session(LGIS)
 - Small Group Discussion(SGD)
 - Self-Directed Learning(SDL)
 - Case Based Learning (CBL)
 - Problem-Based Learning(PBL)

Tables & Figures

- Table1. Domains of learning according to Blooms Taxonomy
- Figure2.Prof Umar's Model of Integrated Lecture
- Table3. Standardization of teaching content in Small Group Discussions
- Table4.Steps of taking Small Group Discussions
- Figure2.PBL7 Jumps Model

Table1.

Domains of learning according to Blooms Taxonomy

Sr. #	Abbreviation	Domains of learning
1.	C	Cognitive Domain: knowledge and mental skills.
	C1	Remembering
	C2	Understanding
	C3	Applying
	C4	Analyzing
	C5	Evaluating
	C6	Creating
2.	P	Psychomotor Domain: motors kills.
	P1	Imitation
	P2	Manipulation
	P3	Precision
	P4	Articulation
	P5	Naturalization
3.	A	Affective Domain: feelings, values, dispositions, attitudes, etc
	A1	Receive
	A2	Respond
	A3	Value
	A4	Organize
	A5	Internalize

• Teaching and Learning Methodologies/Strategies

a. Large Group Interactive Session (LGIS)

The large group interactive session is structured format of Prof Umar Model of Integrated lecture. It will be followed for delivery of all LGIS. Lecturer will introduce a topic or common clinical condition and explains the underlying phenomena through questions, pictures, videos of patients, interviews and exercises, etc. Students are actively involved in the learning process.

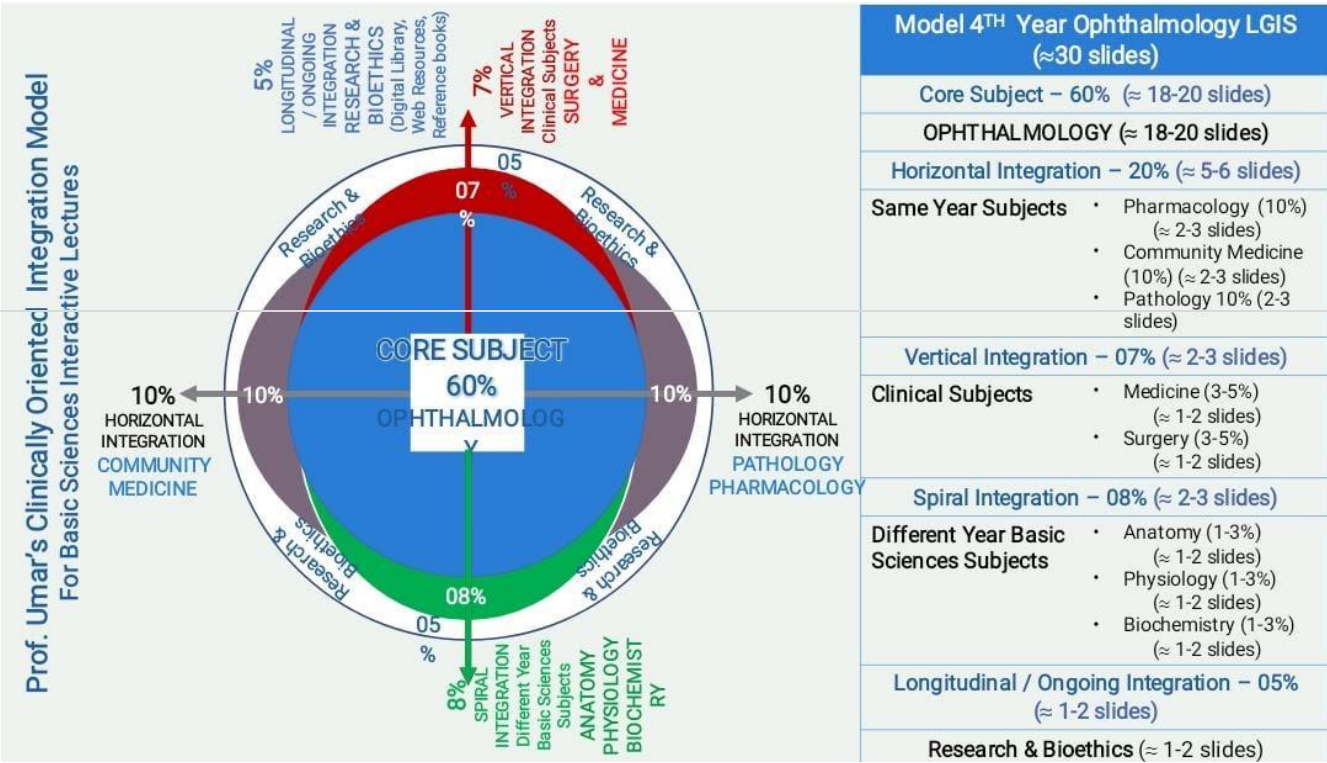


Figure1.Prof Umar’s Eye of Integrated Lecture

b. Small group discussion (SGD):

This format helps students to clarify concepts acquire skills and attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics or power point presentations. Students exchange opinions and apply knowledge gained from lectures, SGDs and self-study. The facilitator role is to ask probing questions, summarize and helps to clarify the concepts.

Table 2.

Standardization of teaching content inSmallGroupDiscussions

S.No	Topics	Approximate%
1	Title Of SGD	
2	Learning Objectives From Study Guides	
3	Horizontal Integration	5%+5%=10%
4	Core Concepts of the Topic	60%
5	Vertical Integration	20%
6	Related Advance Research points	3%
7	Related Ethical points	2%

Table 3.
Steps of taking Small Group discussions

Step1	Sharing of Learning objectives by using students Study guides	First 5 minutes
Step2	Asking students pre-planned questions from previous teaching session to develop co-relation (these questions will be standardized)	5minutes
Step3	Students divided into groups of three and allocation of learning Objectives	5minutes
Step4	ACTIVITY: Students will discuss the learning objectives among Themselves	15minutes
Step5	Each group of students will present its learning objectives	20min
Step6	Discussion of learning content in the main group	30min
Step7	Clarification of concept by the facilitator by asking structured questions from learning content	15min
Step8	Questions on core concepts	
Step9	Questions on horizontal integration	
Step10	Questions on vertical integration	
Step11	Questions on related research article	
Step12	Questions on related ethics content	
Step13	Students Assessment on online M.Steams (5MCQs)	5min
Step14	Summarization of main points by the facilitator	5min
Step15	Students feedback on the SGD and entry into logbook	5min
Step16	Ending remarks	

c. Self-Directed Learning (SDL)

- ☐ Self-directed learning is a process where students take primary charge of planning, continuing and evaluating their learning experiences.
- ☐ Time: Home assignment
- ☐ Learning objectives will be defined
- ☐ Learning resources will be given to students=Textbook (page no),website
- ☐ Assessment: Will be online on LMS

(Mid module/ end of Module)

d. Case Based Learning (CBL)

- ☐ It's a learner centered model which engages students in discussion of specific scenarios that resemble typically are real world examples.
- ☐ Case scenario will be given to the students
- ☐ Will engage students in discussion of specific scenarios that resemble or typically are real-world examples.
- ☐ Learning objectives will be given to the students and will be based on
 - i. To provide students with an opportunity to see theory in practice
 - ii. Require students to analyze data in order to reach a conclusion, develop analytic, communicative and collaborative skills along with content knowledge.

- Title: Ophthalmology Module

a. An Overview Of The Module Teaching And Learning / Assessment Activities Of Department Of Ophthalmology

b.

Teaching and Learning Strategies Teaching Staff / Human Resource

Sr. #	Designation of Teaching Staff/ Human Resources	Total number of teaching staff	Total number of lectures LGIS
1	Professor of Ophthalmology	01	6
2	Assistant Professor of Ophthalmology	02	6
3	Senior Registrars	08	13
4	Post Graduate Residents	26	0

Hours Calculation of various type of Teaching Strategies

Sr. #	Hours Calculation for Various Type of Teaching Strategies	Total Hours
1	Large Group Interactive Session (LECTURES)	1 hour x 18 = 18 Hrs 45 mins x 11 = 8 Hrs 15 mins Total = 26 Hrs 15mins
2	Self-Directed Learning (SDL)	2 hour x 7= 14Hrs
3	Case based learning (CBL)	1 hour x 6 = 6 Hrs 1 hour 45 mins x 2 = 3 Hrs 30 mins 45 mins * 1 = 45 mins Total = 10 Hrs 15 mins

i.

Teaching Staff / Human Resource Distribution of Department of community medicine in Block-II

Sr.no.	Designation	Total number of teaching staff
1	Professor	01
2	Associate professor	02
3	Assistant professor	03
4	demonstrators	05
5	PGTs	05

Detail of Contact hours (faculty) & contact hours (students)

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty)	Total Hours (Students)	Faculty level
1	LGIS (14). 1hrs each session (half class sessions)	2 x 14= 28 hrs.	14	Professor, associate, and assistant professors
2	SGD (3) approx. 2hrs each session. 1/4 th class	2 x 12= 24 hrs.	4	Demos (subject specialists), Senior PGTs
3	PAL (IUGRC) (1) approx. 2hrs per session. (16 small group sessions. 8 sessions per day)	2 x 16 =32 hrs.	2	Demos (subject specialists) supervised by professional faculties
		Total: 86hrs	21hrs	

- Learning Objectives Of Self-Directed Learning (SDL)

- General Learning Objectives Of Self-Directed Learning:

1. Encourages students to learn more effectively.
2. Inspires curiosity and motivates further discovery.
3. Boosts self-esteem.
4. Strengthens problem solving skills.
5. Learning at a comfortable pace.
6. Improves time management skills.
7. Encouraging students to learn from textbooks.
8. Learn to take initiative and act upon goals
9. Role in cognitive development (critical thinking, trial and error analysis)

Sr. #	Topic of SDL	Learning objectives At the end of this session, students will be able to	Assessment		References
			LMS	Modular exams	
1	Fungal Keratitis	<ul style="list-style-type: none"> • Describe the Signs and Symptoms of fungal keratitis • Describe its Pathophysiology • Discuss the Investigations required • Describe its treatment plan 	MCQ	MCQ, SEQ, OSPE	<ul style="list-style-type: none"> • Kanski's Clinical Ophthalmology 9th edition Chapter 7, Page # 216 - 218 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 8, Page # 90-92 https://eyewiki.aao.org/Fungal_Keratitis
2	Congenital Glaucoma	<ul style="list-style-type: none"> • Describe the Signs of symptoms of Congenital Glaucoma • Enumerate the Differential diagnosis of watering in neonates • Discuss its Clinical evaluation in pediatric group • Explain the principles of its Management 	MCQ	MCQ, SEQ, OSPE	<ul style="list-style-type: none"> • Kanski's Clinical Ophthalmology 9th edition Chapter 11, Page # 395 - 398 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 11, Page # 156-159 https://www.aao.org/webinar-detail/primary-secondary-surgery-congenital-glaucoma

3	Steroid induced Glaucoma	<ul style="list-style-type: none"> Describe the pathophysiology of steroid induced glaucoma Enlist the types of steroids causing glaucoma and their route of administration Know about steroid responders Discuss the different treatment options 	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> Kanski's Clinical Ophthalmology 9th edition Chapter 11, Page # 388 Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 11, Page # 155 https://doi.org/10.1016/j.survophthal.2020.01.002
4	Recurrent anterior uveitis	<ul style="list-style-type: none"> Enlist its systemic associations Describe its signs and symptoms Explain the systemic and ocular investigations to be done Describe the management of this case. 	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> Kanski's Clinical Ophthalmology 9th edition Chapter 12, Page # 424 - 442 Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 12, Page # 165 - 168 https://doi.org/10.1016/j.ajo.2008.11.009
5	Ophthalmic manifestations of DM	<ul style="list-style-type: none"> Explain the different presentations of DM in eye Enlist the risk factors for DR Enlist the complications of DR Describe the management of different manifestations 	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> Kanski's Clinical Ophthalmology 9th edition Chapter 13, Page # 496 Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 15, Page # 191 - 197 DOI: 10.1177/1474651411428950
6	Strabismus and Amblyopia	<ul style="list-style-type: none"> Define amblyopia Relationship between strabismus and amblyopia Enlist the different types of squint Describe, how will they assess a patient of squint Describe its Management. 	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> Kanski's Clinical Ophthalmology 9th edition Chapter 18, Page # 707 - 708 Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 22, Page # 282 - 283 https://aapos.org/glossary/amblyopia
7	Complications of Cataract surgery	<ul style="list-style-type: none"> Enlist types of cataract surgery Describe its Pre op and post op complications Describe the management of 	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> Kanski's Clinical Ophthalmology 9th edition Chapter 10, Page # 325 - 335 Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 10, Page # 128 -

		complications			131 https://eyewiki.aao.org/Cataract_Surgery_Complications
8	Approach to Leukocoria	<ul style="list-style-type: none"> ● Enlist the differential diagnosis of Leukocoria ● Discuss different sight and life threatening conditions ● Describe its clinical evaluation and investigations ● Describe its management plan 	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> ● Kanski's Clinical Ophthalmology 9th edition Chapter 20, Page # 864 ● Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 10, Page # 117 https://www.aao.org/eyenet/article/stepwise-approach-to-leukocoria
9	Idiopathic intracranial hypertension	<ul style="list-style-type: none"> ● Describe its Signs and symptoms ● Enlist its differential diagnosis ● Discuss the role of Lumber puncture and MRI ● Describe its management plan 	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> ● Kanski's Clinical Ophthalmology 9th edition Chapter 19, Page # 769 - 770 ● Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 16, Page # 223 - 225 https://doi.org/10.1016/S1474-4422(06)70442-2

● Learning Objectives Of Case-Based Learning (CBL) Ophthalmology Module:

Sr. #	Topic of SDL	Learning objectives. At the end of this session, students will be able to:	Week	Assessment		References
				LMS	Modular exams	
1.	A middle aged farmer with painful red eye after vegetative trauma	<ul style="list-style-type: none"> ● Enlist the causes of keratitis, C2 ● Classify keratitis and enlist sign and symptoms of keratitis. C2 ● Discuss the clinical examination including the different stains used for staining the corneal ulcers C1 ● Describe the treatment of corneal ulcers C2 ● Explain the contact lens related keratitis with its management C2 	1 st weeks	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> ● Kanski's Clinical Ophthalmology 9th edition, Chapter 7, Page # 216 - 218 ● Clinical Ophthalmology by ShafiM.Jatoi 5th edition, Chapter 8, Page # 90-92 <ul style="list-style-type: none"> ● https://eyewiki.aao.org/Fungal_Keratitis
2.	An infant presenting with photophobia, excessive lacrimation and blepharospasm	<ul style="list-style-type: none"> ● Define congenital glaucoma? C1 ● Enumerate different types of secondary glaucoma? C3 ● Describe clinical features of congenital glaucoma? C2 	2 nd week	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> ● Kanski's Clinical Ophthalmology 9th edition Chapter 11, Page # 395 - 398 ● Clinical Ophthalmology by ShafiM.Jatoi 5th edition <ul style="list-style-type: none"> ● Chapter 11, Page # 156-159 https://www.aao.org/webinar-detail/primary-secondary-surgery-congenital-glaucoma

		<ul style="list-style-type: none"> Discuss treatment options? C2 				
3.	A 50yrs old male patient with gradual painless loss of vision.	<ul style="list-style-type: none"> Recall anatomy of Lens C1 Define cataract C1 Enlist classification of cataract, C1 Discuss the clinical examination with investigations to diagnose cataract. C2 Explain the principles of management of cataract. C2 Enlist indications, types and complications of cataract surgery C3 	2 nd Week	MCQ	MCQ, SEQ OSPE	MCQ, SEQ OSPE
4.	A teenage male with recurrent painful red eye which gets better after treatment	<ul style="list-style-type: none"> Recall anatomy of Conjunctiva C1 Enlist common causes, sign and symptoms of conjunctivitis C2 Diagnose infective and allergic conjunctivitis. C3 Discuss the management of conjunctival eye problems C3 	3 rd Week	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> Kanski's Clinical Ophthalmology 9th edition Chapter 20, Page # 167 – 200 https://www.aao.org/eye-health/symptoms/red-eye-3

5.	4yrs old child with intermittent inwards deviation of both eyes for last 6 months	<ul style="list-style-type: none"> Define strabismus C2 Classify strabismus C2 Outline examination and investigation of strabismus Enlist different surgical procedures of squint C2 	3 rd Week	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> Kanski's Clinical Ophthalmology 9th edition Chapter 20, Page # 697 - 743 https://www.aao.org/eye-health/disease/strabismus-in-children
6.	A middle aged obese female with complain of headache and bilateral disc swelling	<ul style="list-style-type: none"> Recall anatomy and pathway of Optic nerve C1 Know the Clinical Features of optic neuritis, papilledema C2 Demonstrate the Indications of neuroimaging, visual evoked potential and visual fields. C2 	4 th Week	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> Kanski's Clinical Ophthalmology 9th edition Chapter 20, Page # 745 – 825 https://eyewiki.aao.org/Demyelinating_Optic_neuritis

7.	6 months old infant with white pupillary reflex since birth.	<ul style="list-style-type: none"> • Discuss Leucocoria (white pupillary reflex) its differential diagnosis. C2 • Describe Retinoblastoma, its clinical presentation and management. C2 • Explain congenital cataract, presentation and management. C2 • Enumerate retinopathy of prematurity, persistent hypertensive, primary vitreous, coats diseases. C2 	5 th Week	MCQ	MCQ, SEQ OSPE	<ul style="list-style-type: none"> • Kanski's Clinical Ophthalmology 9th edition Chapter 20, Page # 864 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition, Chapter 10, Page # 117 <p>https://www.aao.org/eyenet/article/stepwise-approach-to-leukocoria</p>
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● Learning Objectives Of Small Group Discussion (SGD) Community Medicine:

Demonstration	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives	Learning domain	Teaching strategy	Assessment tool
<ul style="list-style-type: none"> HFA-2000 <ul style="list-style-type: none"> PH <ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Health for all Primary health care elements Primary health care principles Alma-Ata declaration Astana Declaration 	<ul style="list-style-type: none"> Understand primary health care Conceptualize 'health for all' and Alma Ata declaration Appraise the elements, principles and strategy of PHC/ Primary healthcare Outline the challenges that contributed to evolvement of PHC Appraise Recent proceedings of Alma-Ata as Astana declaration 	C2 C2	SGD	MCQs, SEQs, OSPE and Viva Voce
Disinfection	<ul style="list-style-type: none"> Infection control in healthcare Sterilization 	<ul style="list-style-type: none"> Differentiate between disinfection and sterilization Enlist properties of an ideal disinfectant 	C2 C1	SGD	MCQs, SAQs, OSPE and Viva Voce

	<ul style="list-style-type: none"> Types of disinfection agents 	<ul style="list-style-type: none"> Categorize disinfection Describe various important types of agents (natural, physical and chemical agents) used as disinfectant Appraise WHO guidelines for infection control in health care 	C2 C2 C3		
Surface infections	<ul style="list-style-type: none"> Trachoma Scabies AIDS Sexually transmitted infections 	<ul style="list-style-type: none"> Describes the epidemiology of surface infections Identify the risk factors of surface infections Recommend the preventive & control measures for surface infections Appraise the working of Punjab Aids Control Program 	C2 C2 C3 C3	SGD	MCQs, SAQs, OSPE and Viva Voce

• Week-Wise Learning Objectives Of Ophthalmolgy Block

1st week

At the end of the session, students will be able to

Sr. #	Topic-	Discipline	Knowledge/Skills	Teaching strategy	Assessment
1	Introduction/ review of ocular anatomy	Anatomy	<ul style="list-style-type: none"> Recall the Basic anatomy of eye C1 	LGIS	MCQs
2	Epidemiology of blindness & accidents	Community Medicine	<ul style="list-style-type: none"> Describe epidemiology of blindness C1 Describe patterns of preventable blindness in the community C1 Describe approaches to prevention of blindness in the community. C1 C2 Categorize different types of accidents. C1 Describe risk factors involved in accidents. C1 Describe different preventive strategies for accident controls. C1 C2 	LGIS	MCQs SEQs
3	Inflammatory and Neoplastic Eyelid lesions	Ophthalmology	<ul style="list-style-type: none"> Recall anatomy of Eye lid C1 Enlist differentials of lid mass C1 Distinguish between inflammatory, benign and 	LGIS	MCQs SEQs

			malignant neoplastic disorders of eyelid. C1		TOACs
4	Neoplasms of eye lid Squamous cell carcinoma Basal cell carcinoma Sebaceous carcinoma melanoma	Pathology	<ul style="list-style-type: none"> By the end of lecture students should be able C1 -to know the pathophysiology, microscopic features and diagnostic features of neoplasms of eyelid C2 -to know differentiating features if different neoplasms of eyelid C2 	SGD	MCQ SEQ OSPE
5	Epidemiology of trachoma (surface infections) 1. Trachoma 2. Leprosy 3. Sexually transmitted diseases 4. Tetanus	Community medicine	<ul style="list-style-type: none"> Describes the epidemiology of trachoma.. C1 Describes role of prevention in trachoma. C1 Describes epidemiology, types of leprosy. C1 Explains of prevention of leprosy in the community. C1 	SGD	MCQs SEQs
6	Ophthalmic dosage forms	Pharmacology	<ul style="list-style-type: none"> Discuss Ocular routes of administration C1 Discuss Systemic effects with ocular administration C3 	LGIS	MCQs
7	Eyelid and eyelash disorders	Ophthalmology	<ul style="list-style-type: none"> Describe the infective lesions of lid - 	LGIS	MCQs, SEQs and OSPE and Viva Voce

			<p>stye/blepharitis and their treatment C1</p> <ul style="list-style-type: none"> • Enlist the inflammatory lesions of lid like chalazion and their treatment C3 • Discuss the common lid tumors and their clinical presentations.C3 • Discuss the Eye - Lash abnormalities. C2 • Describe the pathologies like Trichiasis ,ectropion / entropion and ptosis C2 		
8	Infective and Allergic Conjunctivitis	Ophthalmology	<ul style="list-style-type: none"> • Recall anatomy of Conjunctiva C1 • Enlist common causes, sign and symptoms of conjunctivitis C2 • Diagnose infective and allergic conjunctivitis. C3 • Discuss the management of conjunctival eye problems C3 	LGIS	MCQs
9	Alma Ata declaration and primary health care (PHC)	Community medicine	<ul style="list-style-type: none"> • Define primary health care C1 • Explains Concepts of ‘health for all’ and Alma Ata declaration. C1 C2 • Enlist the elements, principles and strategy of PHC / Primary health care.C1 • Outline the challenges that contributed to 	SGD	MCQs, SEQs and OSPE and Viva Voce

			evolvment of PHC. C1 C2		
10	Keratitis	Ophthalmology	<ul style="list-style-type: none"> ● Recall anatomy of Cornea C2 ● Enlist the causes of keratitis, C2 ● Classify keratitis and enlist sign and symptoms of keratitis. C2 ● Discuss the clinical examination including the different stains used for staining the corneal ulcers C1 ● Describe the treatment of corneal ulcers C2 ● Explain the contact lens related keratitis with its management C2 	LGIS/CBL	MCQs, SEQs,OSPE
11	Degenerative conjunctival disorders and Dry Eyes	Ophthalmology	<ul style="list-style-type: none"> ● Diagnose and manage Dry Eye, C1 ● Conjunctival degenerations (Pterygium, pinguecula, concretions) C2 	LGIS	MCQs
12	Refractive Surgery/ Refractive Errors	Ophthalmology	<ul style="list-style-type: none"> ● Define various refractive errors C1 ● Demonstrate the surgical steps and complications of keratoplasty C1 ● Identify the surgical options and steps for Myopia,Hypermetropia,Presbyopia,Asigmatism and keratoplasty C2 	LGIS	MCQs, OSPE

13	Cataract (Types, causes and workup)	Ophthalmology	<ul style="list-style-type: none"> Define cataract C2 Enlist classification of cataract, C2 Discuss the clinical examination with investigations to diagnose. C3 Explain the principles of management of cataract. C3 	LGIS	MCQs, SEQs, TOACS
14	Drugs used in ocular infections	Pharmacology	<ul style="list-style-type: none"> Discuss Ocular antibiotics/anti-inflammatory and their various routes of administration C1 Enlist indications and side effects C2 	LGIS	MCQs
15	Epidemiology of hospital acquired infection	1. Community medicine	<ul style="list-style-type: none"> Define nosocomial infections C1 Explains the various modes of transmission of nosocomial infections C1 Enlist the various strategies for prevention and control of nosocomial infections C1 	LGIS	MCQs, SEQs and Viva Voce
16	Dermatological disorders involving eye	Dermatology	<ul style="list-style-type: none"> Describe symptoms associated with skin disease C2 Describe what is a primary lesion C2 Explain the types of primary lesion with example C1 Describe what is a secondary lesion C2 Explain the types of such lesion with example C1 	SGD	MCQs

			<ul style="list-style-type: none"> • Tell the important pearls of history and examination C2 • Explain the diagnostic details of basic skin lesions C3 		
17	<p>Conjunctival scarring, pinguecula ,pterygiumand conjunctival neoplasm</p> <p>Corneal keratitis and ulcer</p> <p>Corneal degeneration and dystrophies</p>	<p>Pathology</p> <p>Ophthalmology</p>	<ul style="list-style-type: none"> • To know the pathophysiology,microscopic features of conjunctival scarring C2 • To know pathophysiology of pinguecula and pterygium C2 • To know features of intraepithelial neoplasm and carcinoma C3 • Must be able to explain the pathophysiology of keratitis and corneal ulcers C1 • To explain pathophysiology of band keratopathies ,keratoconus , fuchs endothelial and stromal dystrophies C2 	<p>LGIS</p> <p>LGIS</p>	<p>MCQs</p>

2nd week

At the end of the session, students will be able to

s. no	Topic	Discipline	Knowledge/Skills	Teaching strategy	Assessment
1	Corneal dystrophies and Degenerations	Ophthalmology	<ul style="list-style-type: none"> Recall anatomy of Cornea C2 Know the Clinical Features of corneal dystrophies/ degenerations C1 Explain the significance of Corneal Topograohy C1 Describe pathophysiology of Keratoconus. C2 	LGIS	MCQs
2	Cataract (Types, causes and workup)	Ophthalmology	<ul style="list-style-type: none"> Recall anatomy of Lens C1 Define cataract C1 Enlist classification of cataract, C1 Discuss the clinical examination with investigations to diagnose cataract . C2 Explain the principles of management of cataract. C2 Enlist indications, types and complications of cataract surgery C3 	LGIS	MCQs, SEQs, TOACS

3	Refractive Surgery/ Refractive Errors	Ophthalmology	<ul style="list-style-type: none"> • Define various types of refractive errors C3 • Manage different refractive errors: Myopia, hypermetopia, astigmatism and their methods of correction. C2 • Describe Presbyopia C1 • Discuss different types of spectacle lens/ bifocal/ progressive glasses, C2 • Enumerate types of refractive surgeries C2 • Recall indications and complications of refractive surgeries. C2 • Enlist indications of keratoplasty C1 	LGIS	MCQs, SEQs, TOACS
4	screening I	Community medicine	<ul style="list-style-type: none"> • Define screening. C1 • Explain Iceberg phenomenon of diseases with examples. C1 C2 • Discuss Aims and objectives of screening. C1 • Enlist Criteria for screening of diseases & screening tests. C1 C2 • Discuss uses & types of screening with examples. C1 C2 	LGIS	MCQs SEQs
5	Approach to glaucoma	Ophthalmology	<ul style="list-style-type: none"> • Describe anatomy of drainage angle? C2 • Define glaucoma? C2 • Enumerate visual field defects with glaucoma? C2 • Describe investigations for glaucoma? C1 	LGIS/CBL	MCQs

			<ul style="list-style-type: none"> Describe medical and surgical treatment options for glaucoma? C3 		
6	screening –II	Community medicine	<ul style="list-style-type: none"> State differences between screening tests and diagnostic tests. C1 C2 Describe rationale of screening tests with reference to natural history of disease and critical point. C1 C2 Construct 2x2 table from given data. C1 C2, C3 Explain measures of validity of screening tests. C1 C2, C3 Calculate and interpret sensitivity & specificity of screening test from given data C1 C2, C3 Calculate and interpret PPV & NPV of screening test from given data C1 C2, C3 Discuss issues related to false positives and false negatives. C1 C2, Explain yield of screening tests. C1 C2, Discuss measures used to evaluate screening tests & programs. C1 C2, C3 Explain lead time in screening test. C1 Discuss problems of borderline with emphasis on cut-off point decision. C1 C2, C3 	LGIS	MCQs SEQs, OSPE
7	Thyroid Eye Disease	Ophthalmology	<ul style="list-style-type: none"> Recall anatomy of Orbit C1 Enlist the causes of Proptosis C2 Describe clinical features of Thyroid Eye Disease C3 	LGIS	MCQs, SEQs, TOACS

			<ul style="list-style-type: none"> ● Discuss management of Thyroid Eye Disease C3 		
8	Health education-I	Community medicine	<ul style="list-style-type: none"> ● Define health communication and its types. C1 ● Explain Role of sender, receiver, feedback and content of health message. C1 C2 ● Explains Shannon Weaver communication model. C1 C2 ● Enumerate communication barriers . C1 ● Explain various functions of health communication. C1 	LGIS	MCQs, SEQs and OSPE
9	open and closed angle glaucoma	Ophthalmology	<ul style="list-style-type: none"> ● Classify glaucoma? C1 ● Identify clinical features of congenital glaucoma? C2 ● Describe treatment options of congenital glaucoma? C2 ● Differentiate between primary open angle and closed angle glaucoma? C2 ● Describe treatment options for open and closed angle glaucoma C2 	LGIS	MCQs
10	Drugs used in glaucoma	pharmacology	<ul style="list-style-type: none"> ● Enlist the names of anti-Glaucoma drugs C2 ● Explain their mechanism of action C2 ● Enlist side effects of the anti-glaucoma drugs C1 	LGIS	MCQs, SEQs, TOACS

11	Secondary glaucoma	Ophthalmology	<ul style="list-style-type: none"> ● Define secondary glaucoma? C1 ● Enumerate different types of secondary glaucoma? C3 ● Describe clinical features of different types of secondary glaucoma? C2 ● Discuss treatment options of different types of secondary glaucoma? C2 	LGIS/SDL	MCQs
12	Pathology of cataract, glaucoma, intraocular infections and tumors	pathology	<ul style="list-style-type: none"> ● To know the pathophysiology and types and causes of glaucoma C2 ● -to know features of endophthalmitis and panophthalmitis C2 ● -to know causes and types of uveitis C2 ● -to know the pathophysiology and microscopic features of uveal nevi and malignant melanoma C2 ● -to know the differentiating features between uveal nevi and melanoma C3 	LGIS	MCQs, SEQs, TOACS
13	Health education-II	Community Medicine	<ul style="list-style-type: none"> ● Recognize different models of health education. C1 C2 ● Elaborate the scope /contents of health education C1 ● Explain different approaches of health education C1 	LGIS	MCQs, SEQs and OSPE

3rd week

At the end of the session, students will be able to

s. no	Topic	Discipline	Knowledge/Skills	Teaching strategy	Assessment
1	Lacrimal System NLD blockage, Dacryocystitis	Ophthalmology	<ul style="list-style-type: none"> Describe anatomy of lacrimal system and tears? C2 Identify clinical features of congenital and acquired nasolacrimal duct obstruction? C2 Differentiate between acute and chronic dacryocystitis? C3 Discuss investigations and treatment options of congenital and acquired nasolacrimal duct obstruction C3 	LGIS	MCQs
2	Millennium development goals and sustainable development goals	Community medicine	<ul style="list-style-type: none"> Explain the millennium development goals (MDGs), C1 sustainable development goals (SDGs) and their origins C1 Difference between MDGs and SDGs C2 know how SDGs might affect overall health as a global priority in the future C2 Define universal health coverage C3 	SGD	MCQs, SEQs and OSPE and Viva Voce
3	Blunt Ocular trauma	Ophthalmology	<ul style="list-style-type: none"> Classify the different types of trauma C1 Discuss clinical features of Blunt Orbital trauma and 	LGIS	MCQs, SEQs, TOACS

			Blow out fracture C2 <ul style="list-style-type: none"> Describe management of Blunt Ocular trauma C2 		
4	Health planning and management	Community medicine	<ul style="list-style-type: none"> Define Health Planning C1 Know the aim and objectives of planning C1 Understand rationale of planning C1 Elucidate the different levels of Planning C1 Know-how of different phases of planning. C1 Appreciate the various steps of planning cycle. C1 	LGIS	MCQs, SEQs and OSPE and Viva Voce
5	Infection and tumors of sinuses effecting orbit, Endo DCR	ENT	<ul style="list-style-type: none"> Describe Infection and tumors of sinuses effecting orbit, C1 Explain the indications, procedure and complications of Endo DCR C2 	LGIS	MCQs
6	Penetrating ocular trauma and ocular injuries	Ophthalmology	<ul style="list-style-type: none"> Describe the findings, Grading and Treatment of Chemical injuries C2 Discuss clinical features of Penetrating ocular trauma C2 Describe management of Penetrating Ocular trauma C3 	LGIS	MCQs, SEQs, TOACS
7	Preventive Geriatrics and eye problems	Community medicine	<ul style="list-style-type: none"> Differentiate between geriatrics and gerontology. C1 Explain the public health importance of geriatrics. C1 Enlist common health and other problems related to 	SGD	MCQs, SAQs,

			<p>old age. C1</p> <ul style="list-style-type: none"> • Describe preventive , rehabilitative measures for older age health problems C1 • Explain role of social welfare department for provision of services for elderly. C1 • Describe important activities of World Health Organization for promotion of care of elderly people. C1 		
8	Visual pathway	Ophthalmology	<ul style="list-style-type: none"> • Describe the neuroanatomy of the visual pathways. C1 • Describe the anatomy and functions of cranial nerves 2-7 C2 • Illustrate the pupillary light and accommodation reflex pathway C2 • Describe ocular motility and related neuronal pathways. C3 • Interpret the typical findings and evaluation of the most common visual field defects C2 • (e.g., optic nerve, optic chiasm, optic radiation, occipital cortex). C1 • Describe a systematic, sign-and-symptom-oriented neuro-ophthalmic patient C2 • interrogation (ie, history taking) and recording techniques C2 	LGIS	MCQs, SEQs, TOACS

9	Hospital administration	Community medicine	<ul style="list-style-type: none"> • Define hospital. C1 • Explains development of hospital as an institution. C1 • Appreciate types & functions of hospitals. C1 • Describes Hospital utilization C1 • Elaborates hospital statistics C1 • Identify factors influencing hospital utilization C1 • Know the role of hospital administrator C1 	LGIS	MCQs, SEQs and OSPE and Viva Voce
10	Plastic surgery in periorbital area	Plastic surgery	<ul style="list-style-type: none"> • Explain the various types of procedures of Plastic surgery done in periorbital area C2 	LGIS	MCQs
11	Uvea	Ophthalmology	<ul style="list-style-type: none"> • Classify the different types of uveitis C1 • Enlist the causes and systemic associations C1 • Know the Clinical Features C2 • Enumerate the complications C2 • Describe management of Uveitis C2 	LGIS	MCQs, SEQs, TOACS
12	Squint diagnosis and assessment	Ophthalmology	<ul style="list-style-type: none"> • Define strabismus C2 • Classify strabismus C2 • Outline examination and investigation of strabismus Enlist different surgical procedures of squint C2 	LGIS	MCQs, SEQs, TOACS

13	Health education-III	Community medicine	<ul style="list-style-type: none"> ● Explain principles of health education C1 ● Explain different ways of practice of health education. C1 C2 ● Explain social marketing. C1 	LGIS	MCQs
14	Ocular effects of systemic disease and medicines	Ophthalmology	<ul style="list-style-type: none"> ● Understand Ocular effects of systemic diseases and systemic medications C2 ● Explain Systemic effects of ocular medication C2 	LGIS	MCQs, TOACS
15	Orbital Trauma and Tumours	Radiology	<ul style="list-style-type: none"> ● Describe anatomy of orbit C1 ● Enlist clinical features of fractures of floor of orbit C2 ● Diagnose and manage penetrating injuries of eye C3 ● Diagnosis of Orbital Tumor and Trauma C2 	LGIS	MCQs, SEQs, TOACS
16	Ocular Trauma	Forensic Med.	<ul style="list-style-type: none"> ● Know the Driving criterion C2 ● Understand the Medico legal aspects of ocular trauma (Grievous n Non grievous) C2 	LGIS	MCQs, SEQs, TOACS

4th week

At the end of the session, students will be able to

s. no	Topic	Discipline	Knowledge/Skills	Teaching strategy	Assessment
1	Uveitis; workup and management	Ophthalmology	<ul style="list-style-type: none"> Classify the different types of uveitis C1 Enlist the causes and systemic associations of uveitis C1 Differentiate between acute and chronic uveitis C2 Describe management of uveitis C3 	LGIS/CBL	MCQs, SEQs, TOACS
2	Squint management	Ophthalmology	<ul style="list-style-type: none"> Know the indications of strabismus surgery C1 Enlist Steps of strabismus surgery C3 describe complications of Squint Surgery C2 	LGIS/SDL	MCQs, SEQs, TOACS
3	BULLOUS DISORDERS	Dermatology	<ul style="list-style-type: none"> Classify vesicobullous eruptions on the basis of aetiology C2 Know about common vesicobullous eruptions. C1 examine a patient with vesicobullous eruption C2 diagnose a patient with vesiculobullous eruptions C2 • treat or refer depending upon the diagnosis C2 	LGIS	MCQs
4	Retinal vascular disorders	Ophthalmology	<ul style="list-style-type: none"> Recall anatomy of Retina C1 Distinguishes the symptoms and signs C2 Predicts the prognosis C2 Construct the treatment plan Of Diabetes, CRVO, 	LGIS	MCQs, SEQs, TOACS

			CRAO, AMD C2		
5	Retinal detachment	Ophthalmology	<ul style="list-style-type: none"> ● Recall anatomy of Retina C2 ● Distinguishes the symptoms and signs C2 ● Predicts the prognosis C2 ● Construct the treatment plan Retinitis pigmentosa, Retinal Detachment, Myopic retinopathy C2 	LGIS	MCQs, SEQs, TOACS
6	Cranial nerve palsies/ pupillary abnormalities	Ophthalmology	<ul style="list-style-type: none"> ● Recall anatomy and pathway of Optic nerve C2 ● Know the Clinical Features of cranial nerve palsies and Facial spasm C2 ● Describe ocular motility and related neuronal pathways. C2 ● Discuss the typical features, evaluation, and management of the most common ocular motor neuropathies (e.g., third, fourth, sixth nerve palsy) C2 ● Describe the typical features, evaluation, and management of the most common efferent C2 ● Pupillary abnormalities (e.g., Horner syndrome, third nerve palsy, tonic pupil, light-near dissociation). C2 	LGIS	MCQs, SEQs, TOACS
7	Nail Disorders	Dermatology	<ul style="list-style-type: none"> ● Know the organism and vector of cutaneous leishmaniasis C2 ● Differentiate between old and new world cutaneous 	LGIS	MCQs

			leishmaniasis C2 <ul style="list-style-type: none"> Identify different clinical forms of cutaneous leishmaniasis C3 Investigate properly a case of clinical leishmaniasis C2 Identify organisms of leprosy C3 Differentiate between different types of leprosy C2 Identify lesions of different types of leprosy C2 <ul style="list-style-type: none"> Investigate appropriately a case of leprosy Treat a case of leprosy C2 		
8	Hospital waste management	Community medicine	<ul style="list-style-type: none"> .Explains Healthcare waste... C1 Describe type of waste., Describe risk and non-risk waste.C1 Explain health hazards of health care waste. C1 C2 Describe waste management system, team. C1 .Describe the disposal / treatment technologies for health care waste C1 	LGIS	MCQs SEQs , OSPE
9	ROP Rhabdomyosarcoma, Retinoblastoma	Ophthalmology	<ul style="list-style-type: none"> Discuss Leucocoria (white pupillary reflex) its differential diagnosis. C2 Describe Retinoblastoma, its clinical presentation and management. C2 Explain Congenital cataract, presentation and management. C2 □ Enumerate retinopathy of prematurity, persistent 	LGIS/SDL	MCQs, SEQs, TOACS

			hypertensive, primary vitreous, coats diseases. C2		
10	Disinfection	Community medicine	<ul style="list-style-type: none"> • Differentiate between disinfection and sterilization. C1 C2 • Enlist properties of an ideal disinfectant. C1 • Classify disinfection. C1 • Describe various important types of agents (natural, physical and chemical agents) used as disinfectants. C1 	LGIS	MCQs SEQs, OSPE
11	Optic neuropathies	Ophthalmology	<ul style="list-style-type: none"> • Recall anatomy and pathway of Optic nerve C1 • Know the Clinical Features of optic neuritis, papilledema C2 • Demonstrate the Indications of neuroimaging, visual evoked potential and visual fields. C2 	LGIS	MCQs, SEQs, TOACS
12	Retinal detachment, retinal vascular diseases , -Optic nerve damage in glaucoma -optic neuropathy and optic neuritis	Pathology	<ul style="list-style-type: none"> • -to know the pathophysiology and causes of retinal detachment C2 • -to know the pathophysiology of retinal vascular changes in hypertension , diabetes melitis C3 • -to explain retinal artery and vein occlusion pathology C3 	SGD	MCQs, SEQs, TOACS

13	Cutaneous Leshmaniasis	Dermatology	<ul style="list-style-type: none"> • -Know the organism and vector of cutaneous leishmaniasis C1 • -Differentiate between old and new world cutaneous leishmaniasis C2 • -Identify different clinical forms of cutaneous leishmaniasis C2 • -Investigate properly a case of clinical leishmaniasis C2 • -Identify organisms of leprosy C3 • -Differentiate between different types of leprosy C2 • -Identify lesions of different types of leprosy C2 • -Investigate appropriately a case of leprosy C2 • -Treat a case of leprosy C3 	LGIS	MCQs
14	Space Occupying Lesions	Neurology	<ul style="list-style-type: none"> • Papilledema, Pituitary tumor and associated visual loss C2 	LGIS	MCQs, TOACS

5th week

At the end of the session, students will be able to

s. no	Topic	Discipline	Knowledge/Skills	Teaching strategy	Assessment
1	Psoriasis	Dermatology	<ul style="list-style-type: none">• Describe the risk factors of psoriasis C1• Describe the types according to morphology C2• Explain the modification of psoriasis by site C2• Describe the clinical features of psoriasis C2• Explain the features of psoriatic arthritis C2• vi. Know the treatment options of psoriasis C2	LGIS	MCQs, SEQs, TOACS
2	Optic neuritis	Ophthalmology	<ul style="list-style-type: none">• Recall anatomy and pathway of Optic nerve C1• Know the Clinical Features of optic neuritis, papilledema C2• Demonstrate the Indications of neuroimaging, visual evoked potential and visual fields. C3	LGIS/CBL	MCQs, SEQs, TOACS

- Study Guide Community Medicine Module – II (EYE)

Course outlines, learning objectives, level of learning & assessment tools

Theme: .In public health evidence-based screening programs for early detection of diseases and prevention of diseases specifically eye related issues in different age groups, segments of the population, and playing role in primary health care delivery. Health education and communication taught in this module cannot be neglected in order to provide the care in a manner that recognizes and values the unique cultural background and emotions of every patient, thoughtfully including their families and support systems in every aspect of their care hence successfully master the Core Competency of Interpersonal and Communication Skills. LGIS learning objectives

	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives After The Session Students Will Be Able To:	Learning domain	Teaching strategy	Assessment tool
data analysis	Review of Inferential statistics	<ul style="list-style-type: none"> • Comprehend the relevance of descriptive biostatistics to epidemiological research • Explain principles of descriptive analysis of data. • Perform simple data analysis including quantitative & qualitative data • Perform cross-tabulation between two categorical binomial variables • Calculate of “Standard Error” for the given data • Calculate “ Confidence interval” for the given data 	C2 C2 C3 C3 C3 C3	LGIS	MCQs, SEQs, OSPE Viva
Screening-I	<ul style="list-style-type: none"> • Iceberg phenomenon of disease • Concept of screening • Criteria for screening of diseases 	<ul style="list-style-type: none"> • Explain Iceberg phenomenon of diseases with examples 	C2 C1	LGIS	MCQs, SEQs, OSPE Viva

	and screening tests • Uses & types of screening • Concept of lead time	• Discuss aims and objectives of screening • Enlist Criteria for screening of diseases & screening tests • Comprehend uses & types of screening with examples • State differences between screening test and diagnostic tests. • Describe rationale of screening tests with reference to natural history of disease and critical point. • Construct 2x2 table from given data. • Explain measures of validity of screening tests.	C1, C2 C1, C2 C1, C2 C1, C2 C3 C2		
g-I Screening-II	• sensitivity • specificity • yield • positive predictive value • negative predictive value	• Calculate and interpret sensitivity & specificity of screening test from given data • Calculate and interpret Positive predictive value & Negative predictive value of screening test from given data • Explain yield of screening tests. • Discuss measures used to evaluate screening tests & program • Discuss problems of borderline with emphasis on cut-off point decision.	C3 C3 C1, C2 C2 C2	LGIS	MCQs, SEQs, OSPE Viva

Planning & Management	<ul style="list-style-type: none"> Phases of planning Steps of planning cycle Management methods & techniques 	<ul style="list-style-type: none"> Define Health Planning identify the aim and objectives of planning Understand rationale of planning Comprehend different phases of planning Appreciate the various steps of planning cycle Appreciate various management techniques 	C1 C1 C1 C1 C2	LGIS	MCQs, SEQs, OSPE Viva
How to develop Questionnaire in research. Research Inquiry of Eye Diseases	<ul style="list-style-type: none"> Questionnaire development & its appraisal 	<ul style="list-style-type: none"> Understand about questionnaire used in research Categorize types of questions used in research their advantages and disadvantages identify Designs and stages of development of questionnaire Understand Simple rules for writing a good questionnaire Appraise Parts and Layout of questionnaire 	CI C2 CI C1 C2	LGIS	MCQs, SEQs, OSPE Viva
Health Education-I	<ul style="list-style-type: none"> Communication process Types of health communication Barriers of communication 	<ul style="list-style-type: none"> Define health communication and understand its types. Explain role of sender, receiver, feedback and content of health message 	C1 C2	LGIS	MCQs, SEQs, OSPE, Viva

	<ul style="list-style-type: none"> • Functions of health communication 	<ul style="list-style-type: none"> • Explains Shannon Weaver communication model • Appreciate communication barriers • Explain various functions of health communication 	C2 C2 C1		
• Health education-II	<ul style="list-style-type: none"> • Health education models • Approach to health education • Contents of health education • propaganda 	<ul style="list-style-type: none"> • Recognize different models of health education • Understand the scope /contents of health education • Explain different approaches of health education • Appraise the concept of propaganda 	C2 C2 C1 C2	LGIS	MCQs, SEQs, OSPE Viva
Health education-III	<ul style="list-style-type: none"> • Principles of health education • Practice of health education • Social marketing • CHC message development protocol 	<ul style="list-style-type: none"> • Explain principles of health education • Appraise different ways of practice of health education • Understand social marketing • Comprehend CHC message development protocol 	C1 C2 C2 C2	LGIS	MCQs, SEQs, OSPE and Viva Voce
Prevention and control of Blindness, accidents & injuries in population	<ul style="list-style-type: none"> • Blindness • Accident & injuries 	<ul style="list-style-type: none"> • Describe epidemiology of blindness • Describe patterns of preventable blindness in the community • Recommend approaches to prevention of blindness in the community 	C2 C1 C3	LGIS	MCQs, SEQs, OSPE and Viva Voce

		<ul style="list-style-type: none"> • Categorize different types of accidents • Describe risk factors involved in accidents • Recommend different preventive strategies for accident controls 	C2 C1 C3		
HMIS – health information management system	<ul style="list-style-type: none"> • use of information in healthcare 	<ul style="list-style-type: none"> • Define HMIS • Difference between data and information • Enlist components & features of HMIS • Discuss essential elements & functions of HMIS • Describe steps in developing HMIS • Discuss various sources of health information 	C1 C2 C2 C2	LGIS	MCQs, SEQs, Viva Voce and OSPE
MDGs, SDGs	<ul style="list-style-type: none"> • International health development agenda & road-map • Millennium development goals • Sustainable development goals 	<ul style="list-style-type: none"> • Explain the millennium development goals(MDGs) • Appraise sustainable development goals(SDGs) and their origins • Difference between MDGs and SDGs • comprehend how SDGs might affect overall health as a global priority in the future • understand universal health coverage 	C2 C2 C2 C2 C1	LGIS	MCQs, SEQs, Viva Voce and OSPE

Hospital administration	<ul style="list-style-type: none"> • hospital as an institution • functions of hospital • factors affecting hospital utilization • role of hospital administrator 	<ul style="list-style-type: none"> • Define hospital • Explain development of hospital as an institution • Appreciate types & functions of hospitals • Understand hospital statistics • Identify factors influencing hospital utilization • understand the role of hospital administrator 	C1 C2 C2 C2 C2 C2	LGIS	MCQs, SEQs, Viva Voce and OSPE
Hospital waste management	<ul style="list-style-type: none"> • healthcare waste • types of waste • waste management team • healthcare waste disposal techniques 	<ul style="list-style-type: none"> • Explains Healthcare waste • Categorize risk and non-risk waste • Explain health hazards of health care waste • Describe waste management system, team • Describe the disposal / treatment technologies for health care waste 	C1 C2 C2 C2 C2	LGIS	MCQs, SEQs, Viva Voce and OSPE
Geriatrics	<ul style="list-style-type: none"> • Geriatrics & gerontology • Health problems of old age • Preventive Healthcare of elderly 	<ul style="list-style-type: none"> • Differentiate between geriatrics and gerontology • Explain the public health importance of geriatrics • Enlist common health and other problems related to old age • Recommend preventive, rehabilitative 	C2 C1 C1	LGIS	MCQs, SEQs, OSPE and Viva Voce

		measures for older age health problems	C3		
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Peer assisted learning (PAL)* IUGRC

Contact Session II Time duration; 2hrs/batch

Indictors of accomplishment Prior readings / assigned work	Learning objectives/ competencies	Learning outcomes	Assessment strategy
finalizing the research question & elements of proposal development)	<p>Interactive discussion on how to;</p> <ol style="list-style-type: none"> 1. Finalize research idea or general thought into a topic that can be configured into research problem / formulating research question 2. outline the elements of study proposal in chronological order 3. develop data collection tool 4. do reflective learning 	<p>Each student be able to;</p> <ol style="list-style-type: none"> 1. Develop the list of useful keywords for relevant literature search 2. Perform review of relevant Literature to refine how to approach selected topic and finding a way to analyze it. 3. review community health profile data bases, EMBASE, MEDLINE, PubMed, Google scholar Ovid, ProQuest Psych INFO, Cochrane Database, Scopus) etc. 4. identify knowledge gaps 5. formulate appropriate research questioning the form of a study proposal 6. Attempt “reflective writing. 	<ol style="list-style-type: none"> 1. MCQ in each block exam 2. Viva exam at the end of the session

- TIME TABLE

Integrated Clinically Oriented Modular Curriculum for Fourth Year MBBS

Ophthalmology Module Time Table

Fourth Year MBBS Session 2023 – 2024

Faculty	Prof. Dr Fuad Ahmed Khan Niazi Dr. AmbreenGul (Assistant Professor) Dr. Sidra Jabeen (Assistant Professor) Dr. Rizwan Khan (Senior Registrar) Dr.SairaBano (Senior Registrar) Dr.BilalHumayun (Senior Registrar) Dr. Maria Zubair (Senior Registrar) Dr. Wajeeha (Senior Registrar) Dr. Sidra Naseem (Senior Registrar) Dr. Fatima Sidra Tanveer (senior Registrar) Dr. Sehar Umar (Senior Registrar) Dr. Salman Tariq (Senior Registrar)
Teaching Strategy	LGIS SGD SDL CBL
Lecture Sites	All Lectures in Lecture hall 1 / 2 From Monday till Thursday All Lectures in Lecture hall 4 / 5 Friday and Saturday Even Batch In Lecture Hall 2 And 4 Odd Batch In Lecture Hall 1 And
List of Recommended books	Kanski's Clinical Ophthalmology 9 th edition Parsons' Diseases of the Eye 23 rd edition Basic Ophthalmology by RenuJogi 4 th ed. Clinical Ophthalmology by ShafiM.Jatoi 5 th edition Comprehensive Ophthalmology by Dr. Nasir Chaudhary
Assessment Strategies	MCQs SEQs OSPE Viva Voce

a. Categorization of Modular Content of Ophthalmology

Category A Professor	Category B Assistant Professors	Category C Senior Registrar
<u>Lens;</u> 1. Cataract Surgery and its complications, 2. EctopiaLentis	<u>Cornea;</u> 1. Corneal Disorders - 1, 2. Corneal Disorders – 2.	1. Eyelid and eyelash disorders – 1 2. Eyelid and eyelash disorders – 2 3. Conjunctival Disorders – 1 4. Conjunctival Disorders – 2
<u>Glaucoma;</u> 3. Approach to Glaucoma, 4. Open and Closed Angle Glaucoma, 5. Secondary Glaucoma	<u>Strabismus;</u> 3. Squint diagnosis and assessment 4. Squint Management	5. Uveitis – 1 6. Uveitis – 2 7. Neuroanatomy/ CSF Pathway 8. Lacrimal System
<u>Retina;</u> 6. Retinal Vascular Disorders, 7. Retinal Detachment.	<u>Orbit;</u> 5. Orbital Infections 6. Thyroid Eye Disease	9. Blunt Ocular Trauma 10. Penetrating ocular trauma and chemical injuries 11. Refractive Surgeries and Refractive Errors 12. Cranial Nerve Palsies 13. Optic Neuropathies

Categorization Of Modular Content Of Community Medicine Department

Category A*	Category B**	Category C***		
LGIS	LGIS	SDGS	SDL	IUGRC SESSIONS (PAL)
Data analysis I	Geriatrics	HFA-2000		Selection of research title (Finer Criteria) & literature review
Screening I&II	Hospital waste management	disinfections		
Hospital management	HMIS – use of information in healthcare	Surface infections		
Health education I,II,III	Prevention and control of Blindness			

- Category A*: Fundamental & Complex Concepts taken by Professors, Associate Professors and Assistant Professors
- Category B**: Intermediate concepts. Exercises. By Professorial faculty and Senior Demonstrators/ subject specialists.
- Category C***: Relatively lower complex concepts, exercises/ applications. By Assistant professors, Demonstrators & senior PGTs

Rawalpindi Medical University Rawalpindi New Teaching Block
Tentative Time Table 4th Year MBBS Eye Module 2023

(First Week)

DATE / DAY	8:00 AM – 8:45AM	08:45am – 9:30am	BREAK	10:30am – 12:00pm	12:00pm - 02:00pm
Monday 10/04/23	EYE (LGIS) Refractive Surgery and Refractive Errors Dr Maria/Dr SeherUmer	COMMUNITY MEDICINE (LGIS) Concepts of screening Screening -I Dr. Sana bilal/Dr. Imran	9:30AM – 10:30AM	Clinical Clerkship Annexure -1 (Complete 6 week rotation plan attached at the end of the curriculum)	
Tuesday 11/04/23	EYE (LGIS) Eyelid and eyelash disorders -1 Dr. Fatima Sidra/ Dr. Salman Tahir	COMMUNITY MEDICINE (LGIS) Iceberg phenomenon Screening -II Dr. Sana bilal/Dr. Imran			
Wednesday 12/04/23	PATHOLOGY (LGIS) Neoplasms of Eyelids (Squamous cell Ca, Basal cell Ca) Dr Kiran/ Dr. Sara	PHARMACOLOGY (LGIS) Ophthalmic dosage forms of drugs (LGIS) Dr.Attiya/Dr.Zunaira (Lec Hall 1 and 2)			
	EYE (LGIS) Eyelid and eyelash disorders -2 Dr. Fatima Sidra/ Dr. Salman Tahir	EYE (LGIS) Conjunctival Disorders -1 Dr. Bilal/ Dr. Fatima Sidra			
Friday 14/04/23 To Sat 21/04/23	Spring vacations				

Rawalpindi Medical University Rawalpindi New Teaching Block
Tentative Time Table 4th YEAR MBBS – Special Senses (EYE) 2023

(2nd WEEK)

DATE / DAY		8:00 AM – 9:00 AM		09:00am – 10:00am	BREAK 10:00AM – 10:30AM	10:30am – 12:00pm	12:00pm - 02:00pm		
Monday 23-4-2023	EID HOLIDAYS					Clinical Clerkship Annexure -1 (Complete 6 week rotation plan attached at the end of the curriculum)			
Tuesday 24-4-2023									
Wednesday 26-4-2023	COMMUNITY MEDICINE (LGIS)		EYE (LGIS)						
	Principles of health education Health education I (dr. khola , dr. afifa)		Conjunctival disorders 2 Dr Bilal/ Dr. Fatima Sidra						
Thursday 27-4-2021	Community medicine (LGIS)		EYE (LGIS)						
	Practice of Health Education Health education II (dr. khola , dr. afifa)		Corneal disorders-1 Dr Ambreen/ Dr Maria						
Friday 28-4-2023	08:00AM – 09:45AM		09:45AM – 10:30	10:30AM – 11:15AM	11:15AM – 12:00PM				
	COMMUNITY MEDICINE (PAL)	PATHOLOGY Skill lab	EYE (LGIS)	COMMUNITY MEDICINE (LGIS)	PHARMACOLOGY (LGIS)				
	HRM contact session II Finalizing the research question & elements of proposal development(All Demonstrators & senior faculty)	Neoplastic lesions optic nerve Dr sarah rafi	Glaucoma 1 Dr Fuad/ Dr Ambreen	How to develop a questionnaire in research (research enquiry of eye diseases) Dr.AbdulQudoos/ Dr. Imranasaeed	Drugs used in Ocular infections Dr.Zunaira/Dr.Sobia				
Saturday 29-4-2023	08:00AM – 09:45AM		09:45AM – 10:30AM	10:30AM – 11:15AM		11:45AM – 12:30PM	12:30PM – 01:15PM	01:15PM – 02:00PM	
	PATHOLOGY Skill lab	COMMUNITY MEDICINE (PAL)	EYE (LGIS)	PATHOLOGY(LGIS)		COMMUNITY MEDICINE (LGIS)	Pharmacology (LGIS)	DERMATOLOGY (LGIS)	

	Neoplastic lesions optic nerve Dr sarahrafi	HRM contact session II Finalizing the research question & elements of proposal development (All Demonstrators & senior faculty)	Glaucoma 2 Dr Fuad/ Dr Ambreen	Corneal and Conjunctival degenerative and neoplastic disorders Dr.Kiran/Dr.Sara	Break 11:15 AM – 11:45 AM	Prevention & control of blindness & accidents, injuries (Dr. asif, Dr. abdulqaddus)	Drugs used in Glaucoma Dr.Zunaira /Dr.Sobia	Dermatological disorders involving eye Dr Shahwana Shareef
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Rawalpindi Medical University Rawalpindi New Teaching Block
Tentative Time Table 4th Year MBBS – Special Senses (EYE) 2023

(3rd WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am		10:30am – 12:00pm	12:00pm - 02:00pm
Monday 1-5-2023	LABOUR DAY		Break 10:00AM – 10:30AM	Clinical Clerkship Annexure -1 (Complete 6 week rotation plan attached at the end of the curriculum)	
Tuesday 2-5-2023	COMMUNITY MEDICINE (LGIS)	EYE (LGIS)			
	models of behavior change & CHC message development protocol Health education III (dr. khola , dr. afifa)	Glaucoma 3 Dr Fuad/ Dr Ambreen			
Wednesday 3-5-2023	EYE (LGIS)	EYE (LGIS)			
	Lacrimal system Dr Wajeeha/ Dr. Sehar Umar	Cornea 2 Dr ambreen/ drmaria			
Thursday 4-5-2023	Community medicine (LGIS)	EYE (LGIS)			
	Health management information system Dr Abdul qaddus Dr Asif	Orbit 1 Dr ambreen/ drwajeeha			
Friday 5-5-2023	08:00AM – 09:45AM		09:45AM – 10:30	10:30AM – 11:15AM	11:15AM – 12:00PM
	Community medicine (SGD)	PATHOLOGY (SGD)	EYE (LGIS)	EYE (LGIS)	COMMUNITY MEDICINE (LGIS)
	Disinfection control in health care Dr. afifa Dr. Saba	Non neoplastic lesions of eye lid Dr tayyaba Ali/ Dr Asiyaniazi/ Dr fatimatuzzohra Dr rabbiyakhali	Orbit Dr ambreen/ drwajeeha	Squint diagnosis and assesment Dr Sidra Jabeen/ Dr Rizwan	Hospital Administration Dr. mehar javed Dr Imrana

Saturday 6-5-2023	08:00AM – 09:45AM		09:45AM – 10:30	10:30AM – 11:15AM		11:45AM – 12:30PM	12:30PM – 01:15PM	01:15PM – 02:00PM
	PATHOLOGY (SGD)	Community medicine (SGD)	EYE (LGIS)	EYE (LGIS)		EYE (LGIS)	COMMUNITY MEDICINE (LGIS)	
	Non neoplastic lesions of eye lid Dr tayyaba Ali/ Dr Asiyaniazi/ Dr fatimatuzzohra Dr rabbiyakhali	Disinfection control in health care Dr. afifa Dr. Bushra,	Strabismus – 2 Dr Sidra Jabeen/ Dr Rizwan	Cataract 1 DrFuad / Dr Sidra Jabeen		Blunt ocular trauma Dr saira/ drwajeeha	Hospital waste management practices Dr. Narjis, Dr. memoona	Mid module assessment MCQ paper

Rawalpindi Medical University Rawalpindi New Teaching Block

Tentative Time Table 4th YEAR MBBS –Special Senses (EYE) 2023

(4th WEEK)

DATE / DAY	8:00 AM – 9:00 AM		09:00am – 10:00am	10:30am – 12:00pm	12:00pm - 02:00pm							
Monday 8-05-2023	EYE (LGIS) Thyroid Eye Disease Dr Ambreen/ Dr. Wajeeha		EYE (LGIS) Cataract Surgery and its complications Dr Fuad/ Dr. Sidra Jabeen		Clinical Clerkship Annexure -1 (Complete 6 week rotation plan attached at the end of the curriculum)							
Tuesday 9-5-2023	COMMUNITY MEDICINE (LGIS) Millennium Developoment Goals & Sustainable Development Goals Dr. khola, dr. imran		EYE (LGIS) Visual Pathway Dr Rizwan / Dr Saira									
Wednesday 10-05-2023	Community medicine (LGIS) Planning & management Dr. memoona, dr. imrana		EYE LGIS Retinal Detachment Dr Fuad / Dr Sidra Jabeen									
Thursday 11-05-2023	DERMATOLOGY (LGIS) An Approach To A Patient With Bullous Disorders Dr Shahwana Shareef		EYE (LGIS) Retinal Vascular disorders DrFuad / Dr Sidra Jabeen									
Friday 12-05-2023	08:00AM – 09:45AM		EYE (LGIS)						10:30AM – 11:15AM		11:15AM – 12:00PM	
	Community medicine (SGD)	Pathology (SGD)	EYE (LGIS)						Pathology (LGIS)	EYE LGIS		
	Surface infections (trachoma, scabies, STI,AIDs) Dr. Saba, Dr. mehar javed	Pathophysiology and manifestation of systemic diseases in eye Dr tayyaba Ali/ Dr Asiya niazi/ Dr fatima tuz zohra/Dr rabbiya	Optic Neuropathies Dr Rizwan / Dr Saira						Pathology of cataract, glaucoma, intraocular infections and tumors Dr kiran/ Dr sara	Uveitis – 1 (Workup and management) Dr Maria/ Dr Bilal		
	08:00AM – 09:45AM		09:45AM – 10:30						10:30AM – 11:15AM		BREA K 11:15 AM –	11:45AM – 12:30PM
	Pathology (SGD)	Community medicine (SGD)	EYE (LGIS)	Community medicine (LGIS)		PATHOLOGY (LGIS)	EYE (LGIS)	DERMATOLOGY (LGIS)				

Saturday 13-05-2023	Pathophysiology and manifestation of systemic diseases in eye Dr tayyaba Ali/ Dr Asiya niazi/ Dr fatima tuz zohra Dr rabbiya khali	Surface infections (trachoma, scabies, STI,AIDs) Dr. Saba, Dr. mehar javed	Cranial Nerve Palsies Dr Rizwan / Dr Saira	Preventive health care of elderly/ Geriatrics Dr. narjis, dr. memoona	11:45 AM	Optic neuropathies Retinal detachment Retinal vascular diseases	Uveitis - 2 Dr Maria/ Dr Bilal	An Approach To A Patient With Nail Disorders Dr Shahwana Shareef
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Rawalpindi medical university rawalpindi new teaching block

Tentative Time Table 4th YEAR MBBS – Special Senses (EYE) 2023 (5th WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am	BREAK 10:00AM – 10:30AM	10:30am – 12:00pm	12:00pm - 02:00pm
Monday 15-05-2023	DERMATOLOGY (LGIS)	DERMATOLOGY (LGIS)		Clinical Clerkship Annexure -1 (Complete 6 week rotation plan attached at the end of the curriculum)	
	An approach to a patient with psoriasis Dr Shahwana Shareef	An Approach To A Patient With Cutaneous Leishamniasis Or Leprosy Dr Shahwana Shareef			
Tuesday 16-05-2023	Prep Leaves				
Wednesday 17-05-2023					
Thursday 18-05-2023					
Friday 19-05-2023					
	BLOCK PAPER				

Saturday 20-03-2023	BLOCK OSCE
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- Clinical clerkship

a. Ophthalmology clerkship model

4th year MBBS, RMU

Chairperson: Prof. Dr. Fuad Ahmed Khan Niazi

Coordinator: Dr. Sairabano

Placement: 4th year mbbs

Pre-requisite: Prior knowledge of first 03 years of mbbs

Duration: 06 weeks

Rationale:

Eyes are one of the highly developed sensory organs of human body. Although disorders of eye are commonly encountered in medical practice woefully it is neglected very badly in our undergraduate teaching system. Millions of people are permanently losing their eyesight due to poor diagnosis and inappropriate treatment. Integrated modular system will help to produce a 7 star PM&DC doctor.

Our aim of teaching this module is to have a medical graduate who is aware of the community eye health problems, has a sound knowledge and is able to understand and solve the common problems of eye such as conjunctivitis, cataract, glaucoma, retinal diseases, and errors of refraction and involvement of eyes in systemic disorders. These are some conditions that can be reduce morbidity if properly diagnosed and timely managed.

Educational environment:

Medical school is a habitat with many components, complex dynamics and interactions, inevitable conflicts and is constantly evolving. To facilitate healthy educational environment for 4th year medical students to peer interaction of students and with the faculty will be encouraged. Transfer of knowledge, skills and attitude will be in Wards, operation theatres and clinics. All these measures will enhance the learning capacity of students.

Outcome:

To equip them with essential knowledge, skill and attitude In order to enable them to

- Identify ophthalmic diseases including emergencies, provide primary Eye care, refer to appropriate center and provide follow-up to the patients.
- Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems
- Develop and carry out patient management plans of prevalent Ocular diseases
- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families,
- Perform essential minor surgical procedures
- Understand medical ethics and its application pertaining to Ophthalmology and maintain the confidentiality of the patient.
- Understand the prevalence and prevention of the common Public Health Problem related to Ophthalmology in the community.
- Understand the principles of medical research
- Use information technology to manage information, access online medical information
- Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population

Competencies:

Learning objectives of every theme will be divided according to seven competencies.

1. Communication skills (History taking skill)
2. Clinical Examination skill

3. Critical Thinking
4. Clinical Reasoning
5. Clinical decision making / research
6. Problem solving
7. Communication skill (Counseling skill)

Week 1 (HFH)

Sr#	Date	Day	Teacher	Theme	Topic	Specific Learning Objectives	Station	MOT/MIT	Level of cognition			psychomotor	Affective	MOA
									C1	C2	C3			
1		Monday	Dr sairabano	Gradual painless loss of vision (Case Discussion)	<ul style="list-style-type: none"> • Cataract • Glaucoma • Refractive errors • Diabetic retinopathy • Age related macular degeneration 	<ul style="list-style-type: none"> • Take history of a patient with gradual painless loss of vision • Perform visual acuity, torch examination and fundoscopy, visual field plotting and identify clinical signs of a patient with gradual painless loss of vision • List a differential diagnosis on the basis of history and examination • Propose a mechanism responsible for cataract, open angle glaucoma, refractive errors, diabetic retinopathy and age related macular degeneration • Suggest appropriate treatment for a patient with gradual painless loss of vision 	Eye ward	<ul style="list-style-type: none"> • Bedside teaching • Clinical exposure • Role playing 			C3	P2	A3	OSCE, MiniCEX , Faculty feedback Evidence from logbook
2		Tuesday	Dr Amina khalid/ dr Ayesha	Cataract Surgery	<ul style="list-style-type: none"> • Extracapsular cataract extraction • Phacoemulsification 	<ul style="list-style-type: none"> • Identify the surgical procedures and instruments used during 	Eye OT	<ul style="list-style-type: none"> • Live surgeries • Reco 		C2			A2	MCQS SAQ OSCE

					cation	surgery with their uses <ul style="list-style-type: none"> Identify the drugs and propose their mechanism of action Identify potential complications of disease and its management 		rded videos <ul style="list-style-type: none"> Pre-reading SGD 						Quiz Discussion form
3		Wednesday	Dr Fuad Ahmed Khan Niazi	Ophthalmic examinations/ investigations	<ul style="list-style-type: none"> Torch examination Slit lamp examination Auto refractometer Keratometer Biometry Fundus photographs 	<ul style="list-style-type: none"> Record visual acuity Perform torch examination, pupillary light reflexes and fundoscopy Identify clinical signs of a patient Perform fundoscopy via fundal camera Observe laser treatment Suggest different treatment options for a patient with diabetic retinopathy 	Diabetic clinic/ eye OPD	<ul style="list-style-type: none"> Bedside teaching Clinical exposure Role playing Patient simulation Videos 		C2				OSCE, MiniCEX Self and peer assessment of the skill Evidence from logbook
4		Thursday	Dr sidraJabeen	Refractive errors	<ul style="list-style-type: none"> Myopia Hyperopia astigmatism 	<ul style="list-style-type: none"> Snellen's chart, Autorefraction, Retinoscopy Goldmannapplanat ion tonometry 	Refraction room	<ul style="list-style-type: none"> Bedside teaching Clinical exposure Role playing 			C3		A3	MCQS SAQ OSCE Quiz Discussion form

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Week 2 (HFH)

Sr #	Date	Day	Teacher	Theme	Topics	Specific Learning Objectives	Station	MOT/MIT	Level of cognition			Psychomotor	Affective	MOA
									C 1	C 2	C 3			
1		Monday	Dr Rizwan khan	Sudden painless loss of vision (Case Discussion)	<ul style="list-style-type: none"> Retinal detachment Retinal vascular occlusion Vitreous hemorrhage hyphema Optic neuritis 	<ul style="list-style-type: none"> Take history of a patient with sudden painless loss of vision Record visual acuity Perform torch examination, pupillary light reflexes and fundoscopy Identify clinical signs of a patient with sudden painless loss of vision List a differential diagnosis on the basis of history and examination Propose a mechanism responsible for Retinal detachment, Retinal Vascular occlusion, Vitreous hemorrhage, hyphema and Optic Neuritis Suggest emergency treatment and appropriate referral for a patient with sudden painless loss of vision Identify potential complications of 	Eye ward	<ul style="list-style-type: none"> Bedside teaching Clinical exposure Role playing Patient simulation Videos Discussion group PBL, CBD 			C 3		A2	MCQS SAQ OSCE, MiniCEX Faculty feedback Evidence from logbook

						disease and its management <ul style="list-style-type: none"> Identify the role of lasers in eye Describes the impact of disease on individual, family and society and demonstrate empathic attitude towards patient 									
2		Tuesday	Dr Rafaaq/ Dr Hassan	Surgical Instruments	<ul style="list-style-type: none"> Minor procedure instruments Cataract Surgery instruments Vitroretinal Instruments 	<ul style="list-style-type: none"> Identify the surgical procedures and instruments used during surgery with their uses 	Eye OT	<ul style="list-style-type: none"> Ambulatory teaching 		C 2				A2	MCQS OSCE, MiniCEX Faculty feedback Evidence from logbook
3		Wednesday	Dr Sidra Naseem	Ophthalmic lasers	<ul style="list-style-type: none"> PRP Macular grid Focal macular laser Laser retinopexy 	<ul style="list-style-type: none"> Memorize different types of ophthalmic lasers Cite their uses Observe laser treatment Suggest different treatment options for a patient with diabetic retinopathy Describe principles of ophthalmic lasers 	Diabetic clinic/ eye OPD	<ul style="list-style-type: none"> Clinical exposure Live lasers simulation Videos Discussion group PBL, CBD 		C 2				A2	MCQS OSCE, MiniCEX Faculty feedback Evidence from logbook
4		Thursday	Dr Laiba/ DrFaryal	Posterior segment surgery	<ul style="list-style-type: none"> Scleral buckling Pars plana vitrectomy 	<ul style="list-style-type: none"> Identify different posterior segment surgical procedures and instruments used during surgery with their uses 	Eye OT	<ul style="list-style-type: none"> Live surgeries Recorded videos 		C 2				A2	MCQS OSCE, MiniCEX

						<ul style="list-style-type: none">Describe the basic principles of Parsplana Vitrectomy, Silicon oil injection, Air/Gas Tamponade, Endolaser/Cryotherapy		<ul style="list-style-type: none">Pre-readingSGD						
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Week 3 (BBH)

Sr#	Date	Day	Teacher	Theme	Topic	Specific Learning Objectives	Station	MOT/MIT	Level of cognition			psychomotor	Affective	MOA
									C1	C2	C3			
1		Monday	Dr. Maria	Ophthalmic examinations/ Investigations/Lasers	<ul style="list-style-type: none"> Torch examination Slit lamp examination Visual Fields NdYag Laser B scan LVA 	<ul style="list-style-type: none"> Record visual acuity Perform torch examination, pupillary light reflexes and funduscopy Identify gross Visual Field defects Observe NdYag laser capsulotomy Suggest different treatment options for a patient with retinal detachment 	Laser room/ Eye OPD	<ul style="list-style-type: none"> Bedside teaching Clinical exposure Role playing Patient simulation Videos 		C2			P,A	OSCE, MiniCEX Self and peer assessment of the skill Evidence from logbook
2		Tuesday	Dr.Ali/Dr .Jawwad	Surgical Instruments	<ul style="list-style-type: none"> Minor procedure instruments Cataract Surgery instruments 	<ul style="list-style-type: none"> Identify the surgical procedures and instruments used during surgery with their uses 	Eye OT	ambulatory teaching		C2			P,A	MCQS OSCE, MiniCEX Faculty feedback Evidence from

														logbook	
3		Wednesday	Dr Wajeeha	Clinical Methods	<ul style="list-style-type: none">Visual acuity, Pin hole, BCVALid EversionRegurgitation test, EOM, Cover/Uncover Test	<ul style="list-style-type: none">Perform Visual acuity, Pin hole, BCVALid EversionRegurgitation testEOM, Cover/Uncover Test	Eye OPD	ambulatory teaching		C2				P,A	OSCE, MiniCEX Self and peer assessment of the skill Evidence from logbook
4		Thursday	Dr.Iqra/Dr Omaina	Ophthalmic Drugs	<ul style="list-style-type: none">Antibiotic, SteroidsIOP Lowering Drugs, DyesMiotics, Mydraiactics, Cycloplegics, Anesthetics	<ul style="list-style-type: none">Identify indications, MOA, systemic/local side effects)	Eye OPD	ambulatory teaching		C2					

Week 4 (BBH)

Sr #	Date	Day	Teacher	Theme	Topics	Specific Learning Objectives	Station	MOT/MIT	Level of cognition			psychomotor	Affective	MOA
									C1	C2	C3			
1		Monday	Dr.Fuad Ahmed Khan Niazi	Sudden painless loss of vision (Case Discussion)	<ul style="list-style-type: none"> Retinal vascular occlusion Vitreous 	<ul style="list-style-type: none"> Take history of a patient with sudden painless loss of vision Record visual acuity Perform torch examination, pupillary light reflexes and fundoscopy Identify clinical signs of a patient of Retinal vascular occlusion List a differential diagnosis on the basis of history and examination Propose a mechanism responsible for Retinal Vascular occlusion Suggest emergency treatment and appropriate referral for a patient with sudden painless loss of vision Identify potential complications of disease and its management 	Eye ward/Eye OPD	<ul style="list-style-type: none"> Bed side teaching Clinical exposure Role playing Patient simulation Videos Discussion group PBL, CBD 		C2			P,A	MCQS SAQ OSCE, MiniCEX Faculty feedback Evidence from logbook

						<ul style="list-style-type: none">Identify the role of lasers in eye									
2		Tuesday	Dr Meimoonah/ Dr.Bushra	Cataract Surgery	<ul style="list-style-type: none">Extracapsular cataract extractionPhacoemulsification	<ul style="list-style-type: none">Identify the surgical procedures and instruments used during surgery with their usesIdentify the drugs and propose their mechanism of actionIdentify potential complications of disease and its management	Eye OT	<ul style="list-style-type: none">Live surgeriesRecorded videosPre-readingSGD		C2					MCQS SAQ OSCE Quiz Discussion form
3		Wednesday	Dr.Ambreen	Glaucoma (Open Angle)	<ul style="list-style-type: none">Goldman ApplanationNon-Contact TonometryVisual fieldOCT RNFLCup disc ratio	<ul style="list-style-type: none">Perform Confrontation visual fieldsIdentify clinical signs of a patient with OAGObserve Goldman applanation and NCTSuggest different treatment options for a patient with Open Angle Glaucoma	Eye OPD	<ul style="list-style-type: none">Clinical exposureRole playingPatient simulationVideos		C2					OSCE, MiniCEX Self and peer assessment of the skill Evidence from logbook
4		Thursday	Dr.Ambreen	Glaucoma (Acute Angle Closure)	<ul style="list-style-type: none">Torch examination of anterior segmentPupil examinationYagiridotomy	<ul style="list-style-type: none">Perform Torch examination of anterior segmentPupillary reactionObserve YAG Iridotomy	Eye OPD/ Laser room/ Eye ward	<ul style="list-style-type: none">Bed side teachingClinical exposureRole playing			C3			A3	MCQS SAQ OSCE Quiz Discussion form

Week 5 (DHQ)

Sr #	Date	Day	Teacher	Theme	Topic	Specific Learning Objectives	Station	MOT/MIT	Level of cognition			psychomotor	Affective	MOA
									C1	C2	C3			
1		Monday	Dr Rasheed	Minor surgical prcedures Removal of sutures Chalazion	<ul style="list-style-type: none"> Identification of surgical instruments History taking Pre-op preparation of Patient 	<ul style="list-style-type: none"> Able to Identify surgical procedures Able to Identify instruments and their uses Able to take History of patient of cataract Able to Identify Chalazion and give treatment options 	Eye Ward / Eye OT	Ambulatory teaching		C2			P,A	OSCE, MiniCEX Self and peer assessment of the skill Evidence from logbook
2		Tuesday	Dr.Bilal	Red Eye	<ul style="list-style-type: none"> History taking Causes Bacterial Conjunctivitis Viral Conjunctivitis 	<ul style="list-style-type: none"> Identify the red eye conditions Management of Bacterial and viral conjunctovitis 	Eye OPD	Bedside teaching Clinical exposure Role playing Patient		C2			P,A	MCQS OSCE, MiniCEX Faculty feedback Evidence from logbook
3		Wednesday	Dr Humera	OT Protocols Introduction to phacoemulsification machine	<ul style="list-style-type: none"> Sterilization techniques Phacoemulsification Machine 	<ul style="list-style-type: none"> Identify phacoemulsification machine Sterilization of OT and Instruments 	Eye Ward / Eye OT	ambulatory teaching		C2			P,A	OSCE, MiniCEX Self and peer assessment of the

														skill Evidence from logbook
4		Thursday	Dr Aasma	Conjunctiva Lacrimal Drainage system	<ul style="list-style-type: none"> • Allergic Conjunctivitis • Trauma • Acute and Chronic Dacryocystitis 	<ul style="list-style-type: none"> • Identify the red eye conditions • Able to take History of trauma patient • Able to demonstrate approach to patient with trauma • Able to take History, examine and describe management of dacryocystitis 	Eye OPD	Bedside teaching Clinical exposure Discussion		C2				MCQS SAQ OSCE Quiz Discussion form

Sr #	Date	Day	Teacher	Theme	Topics	Specific Learning Objectives	Station	MOT/MIT	Level of cognition			psychomotor	Affective	MOA
									C 1	C2	C 3			
1		Monday	Dr.Aasma	Chronic Dacryocystitis Pterygium	<ul style="list-style-type: none"> DCR instruments DCR Procedure Pterygium and its management 	<ul style="list-style-type: none"> Able to state the principle of DCR surgery. Able to outline the steps of DCR surgery Able to identify and grade pterygium Able to give treatment options for pterygium 	Eye ward / Eye OT	<ul style="list-style-type: none"> Beds ide teaching Clinical exposure Role playing Patient simulation Videos Discussion group PBL, CBD 		C2			P,A	MCQS SAQ OSCE, MiniCEX Faculty feedback Evidence from logbook
2		Tuesday	Dr.Bilal	Uveitis	<ul style="list-style-type: none"> Anterior Uveitis Posterior Uveitis 	<ul style="list-style-type: none"> Take history of a patient with Uveitis Record visual acuity Perform torch examination, pupillary light reflexes and fundoscopy Identify clinical signs List a differential diagnosis on the basis of history and examination Suggest treatment and appropriate referral for a patient with Uveitis 	Eye OPD	<ul style="list-style-type: none"> Beds ide teaching Clinical exposure Discussion 		C2				MCQS SAQ OSCE Quiz Discussion form

						<ul style="list-style-type: none"> Identify potential complications of disease and its management 										
3		Wednesday	Dr.Humera	Eye Lid Laceration Manual Small Incision cataract Surgery	<ul style="list-style-type: none"> Eye lid repair Manual Small incision cataract surgery 	<ul style="list-style-type: none"> Able to describe principle of eye lid repair Able to Identify procedure MSICS Able to identify crescent knife and describe steps of procedure 	Eye ward / Eye OT	<ul style="list-style-type: none"> Ambulatory teaching 		C2						OSCE, MiniCEX Self and peer assessment of the skill Evidence from logbook
4		Thursday	Dr.Rasheed	Adenexal benign and malignant conditions Ptosis	<ul style="list-style-type: none"> Blepharitis Benign and malignant adenexal masses Ptosis 	<ul style="list-style-type: none"> Perform eye lid examination Perform ptosis examination Able to identify eyelid pathologies and able to give treatment options 	Eye OPD	<ul style="list-style-type: none"> Bedside teaching Clinical exposure Role playing 			C3			A3		MCQS SAQ OSCE Quiz Discussion form

b. Community Oriented Clerkship module

4th year MBBS

Department of community medicine & public Health RMU

Theme (aim):

The primary purpose of this module is to educate students in those areas of the subject of CM&PH which are learnt better by onsite presence of the students at certain sites, processes, agencies which have public health relevance and in general community setting. Moreover some, areas of the subject which demands close interactive teachings in small group like HHS data analysis & report writing skills, contraceptive use skills, vaccination skills, etc are also covered during this rotation. All opportunities available within and outside the institution within affordable logistics, time, are focused for this purpose. A short time of this batch rotation is dedicated for health education communication practices as Health awareness work and other social work.

Learning outcomes (LOs):

at the end of this learning module students are expected to achieve following Public health Competencies as will be able to:

1. Undertake a population based health survey (HHS)
2. Appreciate working of First level Care Facility (Public Sector)
3. Perform Community Immunization / EPI vaccinations.
4. Develop Hospital waste management plans.
5. Develop Community based health awareness message.
6. Communicate for Health awareness in community settings.

7. Commemorate International public health days.
8. Develop Hospital administration Plans.
9. Undertake Preventive healthcare inquiries and NCDs Risk Factors Surveillance
10. Counsel for the contraceptive devices to the community

Module outline:

- A batch comprising 20-22 students is posted in the department of CM & PH for a period of 2weeks (Monday to Thursday-04 hrs. /day & for 32hrs in total). This schedule is run over the whole academic year, till all students of 4th year MBBS class passes through this rotation.
- Batch formation and schedules of rotation for whole class as notified by the DME / Student's section will be followed accordingly.
- At commencement of the academic year overall batch learning module coordinator, nomination of batch in-charges, senior faculty in charges and calendar schedule of batch rotation for all batches over the whole academic year will be notified by the Department of CM & PH.

Domains of learning: learning will occur in all the three domains C, A & P

SOPs of Learning & Assessments:

- Active participation will be graded by the batch in charge (under a check list) during the activity / session and grades/marks will be entered in the practical manual as out of 05 (Max marks 05) by the batch in charge. 05 Max Marks are reserved for CHC (HMDTD and Health awareness work.
- Assessment will be done by OSPE / MCQs Exam / Viva voce at the end of each module and credit will be objectively recorded for the purpose of internal assessment. (Max mark 10)
- General assessment of the subject learning will be through MCQs, SEQs & OSPE on the relevant subjects in the relevant end of modules, block exams and Send up Exams.
- Students are required to report / write the relevant work in Practical Journal, House Hold Survey Report Book and log all the clerkship activities in the Logbook on daily basis.

Core Planner of Community Oriented Clerkship in the subject of Community Medicine (2 weeks batch rotation)

[Calendar schedule as notified by DME will be followed accordingly]

Day	Activity -I 10.30 – 11.00	Activity – II 11.00- 11.30am	Activity –III 11.30- 01.00pm	Act-V 01.00 – 2.00pm	Sites of teaching- learning	Assessment	Session outcome (level of learning)
	Session topic	Session topic	Session topic	Session topic			
1 st day	instructing / demonstration on Practical Manual based Assignments	<ul style="list-style-type: none"> ● Visit to CHC ● SGIS on Health days commemoration work, Display material, PPT. 	<ul style="list-style-type: none"> ● SGIS on HM-DTD practicum. Topic finalization, CHC-Message draft outlines finalization. 	<ul style="list-style-type: none"> ● PPT based Demo on How to conduct & report HHS. ● Guidelines on PHI work to be done during clinical rotations / ward duties 	<ul style="list-style-type: none"> ● Demonstrati on / lec -Hall 3 ● CHC -Dept CM NTB RMU. 	<ul style="list-style-type: none"> ● 1-2 OSPE in end of clerkship exam (credit will part of IA) ● Assessment of HHS -Report (Max marks:5 part practical /viva exam 4th Prof MBBS) 	<ul style="list-style-type: none"> ● Construct a health message. (C6) ● Prepare Health days commemoration stuff, Display material, PPT, (P) ● Undertake a health survey. (HHS) (C3)
2 nd day	Follow up session on. - HM-DTD work - HHS work - health days commemoration work	SGIS/ Briefing / PPT based guidelines on field visit of the day (EPI services center HFH)	FV to the EPI center HFH	Health awareness work (HAW)	<ul style="list-style-type: none"> ● Demo Room, ● EPI Center HFH ● OPD, hospital shelters sites for health awareness work (HAW) 	<ul style="list-style-type: none"> ● 1-2 OSPE in end of clerkship exam (credit will part of IA) ● Grade of performance in EPI visit reporting. ● Credit of HAW 	<ul style="list-style-type: none"> ● Explain cold chain component at EPI center ● Vaccinate (EPI) vaccines to the clients . ● Comprehend EPI system

3 rd day	Follow up session on HM-DTD work & HHS	SGIS / Briefing / PPT based guidelines on FV to MCH & FP Services Center HFH	FV to the MCH services & FP center HFH	Health awareness work (HAW)	<ul style="list-style-type: none"> FP Center HFH OPD, hospital shelters sites for HAW 	<ul style="list-style-type: none"> 1-2 OSPE in end of clerkship exam (credit will part of IA) Grade of performance in EPI visit reporting. Credit of HAW 	<ul style="list-style-type: none"> Identify CP devices available at MHC FP center Counsel clients for use of a contraception method Place CP devices to client (P)
4 th day	Follow up session on HM-DTD work & HHS	Briefing / guidelines on FV Hospital waste disposal system in hospitals	<ul style="list-style-type: none"> FV to the hospital waste disposal system & relevant sites / Incinerator 	Health awareness work (HAW)	<ul style="list-style-type: none"> FP Center HFH OPD, hospital shelters sites for HAW 	<ul style="list-style-type: none"> End of module OSPE Grade of performance in visits to sites 	<ul style="list-style-type: none"> Explain hospital waste disposal system Develop a hospital waste management plan Explains various domains of hospital management (C2)
5 th day (week 2)	SGIS / PPT based briefing on Hospital management & administration	Visit to Hospital management & administration (HFH) office		Health awareness work (HAW)	HHF	<ul style="list-style-type: none"> End of module OSPE Grade of performance in visits to sites 	
6 th day	SGIS / PPT based briefing on visit to First level of health care facility (FLCF) BHU/RHC	Field visit to RHC Khyaban Sir-Syed (RHC) or BHU	<ul style="list-style-type: none"> Demo room / lec Hall 3 NTB / CPC-Hall . RHC / BHU 	Health awareness work (HAW) at site visited		<ul style="list-style-type: none"> End of module OSPE Report credit in PJ 	<ul style="list-style-type: none"> Explain working of FLCF Appreciate PHC elements at FLCF. (C2)

7 th day	Health days commemoration (walk/ seminar/ presentation/ CHC-message dissemination work (10.30 – 12.00pm)	12.00 – 2.00pm <ul style="list-style-type: none"> Completion & assessment of relevant Practical Journal work, HHS-report book, Logbook etc. Feedback discussion on PHI 	<ul style="list-style-type: none"> Communication skills Comprehend frequency Preventable RFs of NCDs in the real population (RF surveillance) Undertake a preventive Healthcare inquiry
8 th day	Museum learning module (MLM) / visit to departmental Museum 10.30- 12.30	<ul style="list-style-type: none"> Endo of module OSPE (12.30 – 2.00pm) OPSE conduction (10 stations video assisted OPSE / OSPE) for 40 total marks . 	Plus Completion of any remaining work journal assessment HHS report assessment Students feedback etc

Community based / Field Visits

Each batch will be perform at least 02 filed visits of sites of Public health importance outside the institutions under available opportunities and logistics. Following sites may be considered for the purpose.

- I. RHC Khiaban-e-Sir-Syed Rawalpindi / DHO
- II. Sewerage Treatment Plant I-8 Islamabad
- III. Water purification plant Rawal Dame Islamabad
- IV. Child protection Bureau Rawalpindi
- V. Community Livings / urban slums - US-15 Rawalpindi
- VI. National Vaccination production unit– ChukShahzad Islamabad
- VII. Vaccines & Venom Production Unit, NIH, Islamabad
- VIII. Clinical Trail Unit, NIH- Islamabad
- IX. Diseases Surveillance & control / SAAL office. NIH Islamabad
- X. WHO-Office, ChukShahzad, Islamabad
- XI. National Command & Operation Control Office (NCOC) / System. Disaster Control & Management office Islamabad
- XII. Office of Punjab Food Control Authority – Rawalpindi
- XIII. Drug intoxication & Rehabilitation center Dept of Psychiatry BBH Rawalpindi
- XIV. Any site appropriate & feasible for the purpose.

LOs:

Students will better comprehend the System, Mechanism, or Processes (visited) of community health or public health relevance in regional practices context. (Practice based Learning)

Feasibility, opportunity, and logistics: every visit will be planned subject to:

1. Approval of competent authority (RMU) in given conditions.
2. Time space available (total 8 days rotation & with max 04 hrs. a day)
3. Availability of Transport
4. Consent / approval of f remote sites
5. Another justified pre-visit approval/favor or fulfillment of need.

Note:

1. Colander schedule of each batch will be noticed by the Department of community medicine prior to the commencement of the batch rotation.
2. Students will have to record all activities of the clerkship in the relevant Logbook accordingly. Students will keep logbook updated and duly signed by faculties & departments.

Learning Resources

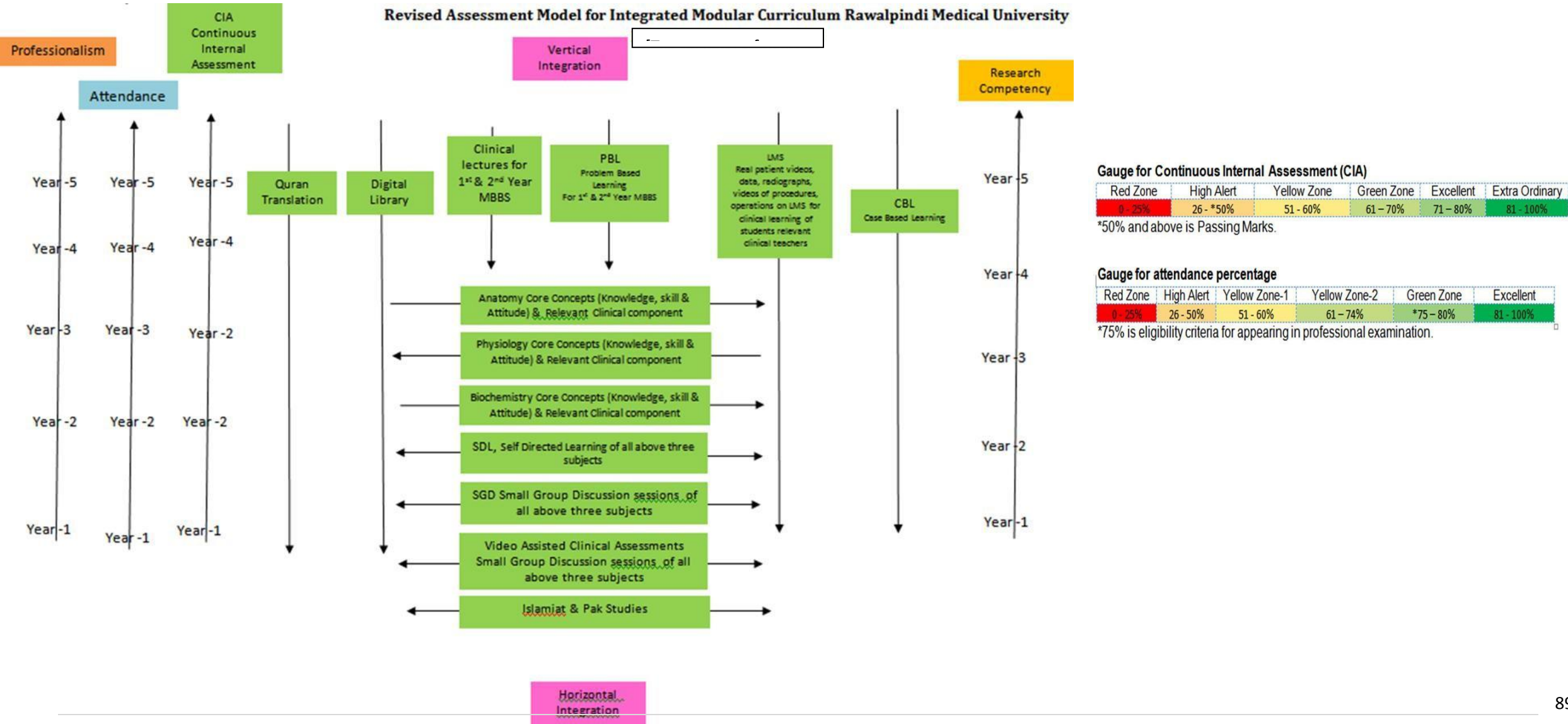
Community Medicine

- Park's Textbook of Preventive and Social Medicine, 26th edition, Chapter 3, 4, 5
- Textbook of Community Medicine by Muhammad Ilyas and Dr Irfanullah Siddiqi
- Epidemiology by Leon Girdis

- Assessment policies

Contents

- Assessment plan
- Types of Assessment:
 - Modular Examinations
 - Block Examination
- Table 4: Assessment Frequency & Time in ophthalmology Module



Assessment plan

University has followed the guidelines of Pakistan Medical and Dental Council for assessment. Assessment is conducted at the mid modular, modular and block levels.

Types of Assessment:

The assessment is formative and summative.

Formative Assessment

Formative assessment is taken at modular (2/3 rd of the module is complete) level through MS Teams. Tool for this assessment is best choice questions and all subjects are given the share according to their hour percentage.

Summative Assessment:

Summative assessment is taken at the mid modular (LMS Based), modular and block levels.

Theory Paper

Modular Examinations

There is a module examination at the end of first module. The content of the whole teaching of the module are tested in this examination.

It consists of paper with objective type questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module. (Annexure I attached)

Viva Voce:

Structured table viva voce is conducted including the practical content of the module.

Block Examination

On completion of a block which consists of two modules, there is a block examination which consists of one theory paper and a structured viva with OSPE.

Theory Paper

There is one written paper for each subject. The paper consists of objective type questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module.

Block OSPE

This covers the practical content of whole block.

Table4-AssessmentFrequency &Time In Ophthalmology module

Block	Module – 1		Type of Assessments	Total Assessments Time			No. of Assessments	
	Sr #	Ophthalmology Module Components		Assessment Time	Summative Assessment Time	Formative Assessment Time		
	1	Weekly LMS quiz	Summative	30 minutes X 4	5 Hours 40 Minutes			
	2	Mid Module Examinations LMS based)	Summative	30 Minutes		40 Minutes	2 Formative	5 Summative
	3	Topics of SDL Examination on MS Team	Formative	30 Minutes				
	4	End Module Examinations(SEQ&MCQs Based)	Summative	2 Hours				
	5	Ophthalmology OSPE	Summative	60 Minutes				
	6.	Assessment of clinical lectures	Formative	10 Minutes				
	7.		Summative	10 Minutes				

Schedule of Assessment Community Medicine Module-II /Block-II Special Senses-II (Eye)

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Remarks	Remarks	Colander schedule
1 st	One best option MCQs test	CIA	Mid module after 02 weeks module	LMS test	Credit will be part of IA	Will be notified by DME
2 nd	MCQ, SEQs, based examination	CIA	End of module /block exam	On campus test	Credit will be part of IA	Will be notified by DME
3 rd	OSPE	CIA	“	“	“	
4 th	Viva Exam	CIA	“	“	“	

Assessments

Continous

- Provide early indications of the performance of students.
- Provides students with a constant stream of opportunities to prove their mastery of material and sends the message that everyone can succeed if given enough time and practice. This reduces the anxiety around testing and heightens the emphasis on the learning itself.
- Advanced students can progress through material at their own pace and remain engaged by pursuing more challenging work as they master the basics

Formative

- Helps students to learn and practice
- Log Book, Evening ward rounds , Clinical Ward tests (component of the Third Professional Clinical Examination taught in particular Unit/ward rotation)

Summative

Assess students' performance

- End Block Assessment (EBA)
- Third Professional Examination

a. TOS Mid Module Assessment

Mid module assessment has been devised for the assessment of initial half of eye module.

It is an LMS based test and will take place at the completion of 3 weeks.

The assessment will comprise of 50 MCQs. (1 mark each). 35 MCQs will be from ophthalmology and 15 from community medicine. It will have weightage in internal assessment.

TOS Ophthalmology component of mid module assessment

<u>Topics of Mid Module Assessment</u>		<u>Teaching hours</u>	<u>No. of MCQ</u>	<u>Level of cognition</u>		
				C1	C2	C3
1	Eyelid Disorders		3		1	2
2	Conjunctival Disorders		4		2	2
3	Corneal Disorders		5	1	2	2
4	Refractive error/ Refractive surgery		5	1	2	2
5	Cataract and other lens disorders		7	2	2	3
6	Glaucoma		6	2	2	2
7	Orbital Disorders		5	1	2	2

TOS Community Medicine component of mid module assessment

Sr no.	Topics of mid module assessment	Teaching hours	MCQs	Level of cognition		
				C1	C2	C3
1	Screening	2	2			2
2	Planning and management	1	1			1
3	HFA PHC Elements & principles	1	1			1
4	How to develop questionnaire in research .	1	1			1
5	Review of inferential statistics	1	1			1
6	Health education	3	2		1	1
7	Prevention and control of blindness,accidents,injuries in population	1	1			1
8	MDG,SGD,internal health development agenda & road map	1	1	1		
10	Hospital administration	1	2		1	
11	Hospital waste management	1	1	1		
12	Disinfection	1	1	1		
	Total	14	14			

b. End Block Assessment

Table of Specifications (End Block Exam)

- End Block Examination (EBE) has been devised for assessment of 5 weeks' eye module. It has undergone a number of modifications over last few years. A lot of effort has been done to make it uniform and standardized keeping in mind attachment of Medical Students to more than one hospital and Ten Departments.
- It will be held at the end of module
- The assessment will comprise of
 - 50 MCQs. (1 mark each); 35 MCQs will be from ophthalmology and 20 from community medicine.
 - 10 SEQs (5 marks each); 7 from ophthalmology and 3 from community medicine.
 - 21 OSCE (5 marks each); 14 from ophthalmology and 7 from community medicine.

Subject Distribution Of End Block Exam

Sr no	Discipline	No of MCQs	No of MCQ according to cognitive domain			No of SEQ	total marks	No of SEQ according to cognitive domain			OSPE		Total marks	Internal assessment
			C1	C2	C3			C1	C2	C3				
1.	Ophthalmology	35		15	20	7	35	3	2	2	14	70	140	90 MARKS (60 ophthalmology; 30 C-Med)
2.	Community medicine	20	10	7	3	3	15	1	1	1	7	35	70	
Grand Total													210	300

TOS Ophthalmology Component –End Block Assessment

Sr#	TOPIC	Weightage	No. of SEQs	No. of MCQs	Level of Cognition (MCQs)
1	Anatomy	02 %	-	1	1 MCQ- C3
2	Orbit	04 %	-	2	2 MCQs -C2
3	Lids & Adnexa	06 %	-	2	1 MCQs- C3 1 MCQ- C2
4	Lacrimal System	11 %	1	2	1 MCQs- C3 1 MCQs- C2
5	Conjunctiva	13 %	0.5	3	1 MCQs- C3 2 MCQs-C2
6	Cornea	11 %	0.5	4	2 MCQs- C3 2 MCQs- C2
7	Uvea	08 %	1	3	1 MCQs- C3 2 MCQs- C2
8	Glaucoma	11 %	1	4	2 MCQs- C3 2 MCQs- C2
9	Lens	13 %	1	5	3 MCQs- C3 2 MCQs- C2
10	Vitreo-Retina	08 %	1	4	1 MCQs- C3 3 MCQs- C2
11	Neuro-Ophthalmology	04 %	0.5	2	1 MCQs- C3 1 MCQs- C2
12	Pediatric Ophthalmology	05 %	0.5	1	1 MCQs- C2
13	Trauma	04 %	-	2	2 MCQs- C3
	TOTAL	100 %	07 (35 marks)	35 (35 marks)	

TOS Community Medicine- written component

<u>Topics of Module Assessment</u>	<u>Teaching hours</u>	<u>No. of MCQs (01 mark each)</u>	<u>Level of cognition</u>			<u>No. of SEQs</u>
			C1	C2	C3	(5 marks each)
1 Screening	2	2			2	1
2 Planning and management	1	1			1	1
3 HFA PHC Elements & principles	1	1			2	
4 How to develop questionnaire in research.	1	1			1	
5 Review of inferential statistics	1	1			2	
6 Health education	3	3		2	1	
7 Prevention and control of blindness,accidents,injuries in population	1	2			1	1
8 MDG,SGD,internal health development agenda & road map	1	1	1			
10 Hospital administration	1	2	1			
11 Hospital waste management	1	1	1	1		
12 Disinfection	1	1		1		
13 Geriatrics	1	1	1			
14 Surface infections	1	2	1		1	
15 HMIS	1	1	1			
Total	17	20				03

c. End Block Assessment Clinical Component

Clinical component comprises of OSCE and Ward test

OSCE Component Breakup

Total stations: 14

Marks: 14 X 5 = 70

Stations will be from the above mentioned clinical competencies.

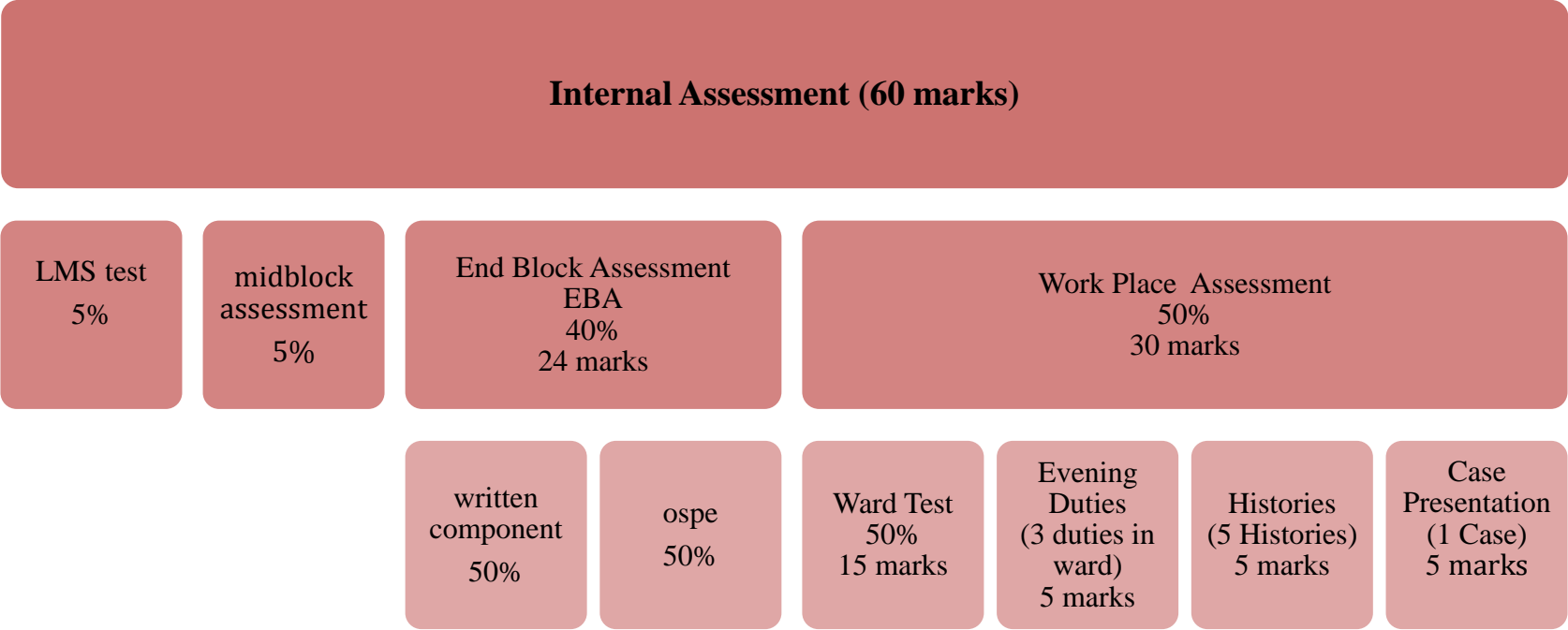
Content	No. of stations
Eyelids and adnexa	1
Lens and Cataract	2
Refractive error	1
Cornea and external diseases	1
Glaucoma	1
Neuro-ophthalmology	1
Pediatric ophthalmology and Strabismus	1
Vitreoretinal diseases	2
Uveitis and ocular inflammation	1
Orbit	1
Trauma	1
Community eye health	1

d. Ward Test Component Breakup

Fourth year MBBS students have to complete 6 weeks clinical clerkship in Ophthalmology which includes 2 weeks rotation individually in HFH, BBH and DHQ. Ward test will be taken at the end of each fortnightly rotation in respective hospitals.

Sr.no	Component	Marks
1	Clinical methods	5
2	Instruments/ Ophthalmic medicines	5
3	Viva voce	5
	Total	15

e. Internal Assessment Component Breakup



f. 4th year Professional Examination

(Same TOS will be followed for send-up examination)

Theory 35% of total marks		Clinical & Practical 35% of total marks		Internal Assessment (30%)	Total
70		70		60	200
		Structured Clinical Evaluation			
MCQs 35 (1 number each)	SEQs 7 (5 number each)	Interactive stations 2 stations 10 marks each	OSPE		
			10 stations (5 numbers each)		
Numbers		Number			
35	35	20	50		

TOS 4th year MBBS Professional Examination

TOPIC	Weightage	No. of SEQs	No. of MCQs	Level of Cognition (MCQs)
Anatomy	1.5 %	-	1	1- C3
Orbit	1.5 %	-	1	1 -C2
Lids & Adnexa	1.5 %	-	1	1 - C3
Lacrimal System	6 %	-	4	2- C3 2- C2
Conjunctiva	8 %	1	3	1 - C3 2 -C2
Cornea	9 %		4	2 - C3 2 - C2
Uvea	6 %	-	4	2- C3 2- C2
Glaucoma	14 %	1	4	4- C3 2- C2
Lens	14 %	1	4	2- C3 2- C2
Vitreo-Retina	14 %	1	4	2 - C3 2- C2
Neuro-Ophthalmology	5.5 %	1	2	1 - C3 1 - C2
Strabismus	4 %		1	1 - C2
Pediatric Ophthalmology	8%	1	1	1 - C2
Trauma	8 %	1	1	1 - C3
TOTAL	100 %	7 (35 marks)	35 (35 marks)	

OSCE Distribution

Total stations: 10

Marks: 10 X 5 = 50

Stations will be from the below-

Mentioned clinical competencies.

Content	No. of stations
Lens and Cataract	1
Refractive Errors	1
Cornea and external diseases	1
Glaucoma	1
Neuro-ophthalmology	1
Pediatric ophthalmology and Strabismus	1
Vitreoretinal diseases	1
Uveitis and ocular inflammation	1
Community eye health	1
Emergency Medicine	1
Total	10

Structured interactive stations Component Breakup

Total number of interactive stations = 2

Marks: 2 X 10 = 20

Stations will be from the below

s. no	Short cases	Topics	breakup	Marks distribution
1	Clinical Methods	<ol style="list-style-type: none"> 1. Ptosis, 2. Pupillary examination, 3. Extraocular movements, 4. Torch examination, 5. Regurgitation test 6. Confrontation visual fields 7. Cranial nerves 	<ul style="list-style-type: none"> • Greet and consent • Perform relevant clinical examination according to given instructions • Give correct findings with logical interpretation • Suggest relevant investigations • Management plan • Recent advances 	<p>1</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>1</p>
2	Video or picture assisted or patient	<ul style="list-style-type: none"> • Ocular pathology or clinical sign 	<ul style="list-style-type: none"> • Identify shown ocular pathology/ clinical sign • Give differential diagnosis • Justifies diagnosis • Suggest relevant investigations • Management plan • Recent advances 	<p>1</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>1</p>

- Research

Cultivating the culture of Research has always been envisioned as one of the main pillars of Rawalpindi Medical University, as a means to develop healthcare professionals capable of contributing to the development of their country and the world. For the purpose thereof, right from the inception of Rawalpindi Medical University, efforts were concentrated to establish a comprehensive framework for research in Rawalpindi Medical University, as a matter of prime importance. With team efforts of specialists in the field of research, framework was made during the first year of the RMU, for the development and promotion of Research activities in RMU, called the Research Model of RMU, giving clear scheme and plan for establishment of required components for not only promoting, facilitating and monitoring the research activities but also to promote entrepreneurship through research for future development of RMU itself.



- Biomedical ethics

Ethical choices, both minor and major, confront us every day in the provision of health care for persons with diverse values living in a pluralistic and multicultural society.

Four commonly accepted principles of health care ethics, excerpted from Beauchamp and Childress (2008), include the:

1. Principle of respect for autonomy,
2. Principle of nonmaleficence,
3. Principle of beneficence, and
4. Principle of justice.

- Family medicine

Family Medicine is the primary care medical specialty concerned with provision of comprehensive health care to the individual and the family regardless of sex, age or type of problem. It is the specialty of breadth that integrates the biological, clinical and behavioral sciences. Family physicians can themselves provide care for the majority of conditions encountered in the ambulatory setting and integrate all necessary health care services.

- Artificial intelligence

Artificial intelligence in medicine is the use of machine learning models to search medical data and uncover insights to help improve health outcomes and patient experiences. Artificial intelligence (AI) is quickly becoming an integral part of modern healthcare. AI algorithms and other applications powered by AI are being used to support medical professionals in clinical settings and in ongoing research. Currently, the most common roles for AI in medical settings are clinical decision support and imaging analysis.

- Sample paper

Fourth Year Block II (Eye) Exam 2022

Sample Paper MCQs

MCQs

Time allowed: 60 mins

Total Marks: 35 (eye) + 20 (C.Med) = 55

1. A one-year-old baby is brought to eye opd by her parents with complain of watering, photophobia and enalarged eye ball. On examination there is hazy cornea with inadequate view of the angle and increased intraocular pressure on digital tonometry. Topical and systemic iop lowering drugs were given and a surgical intervention was decided to be performed. The most appropriate surgical procedure for this patient is
 - a. Lens extraction
 - b. Goniotomy
 - c. Trabeculotomy
 - d. Cyclolaser ablation
 - e. Anterior chamber paracentesis
2. An 18 months old baby was brought to eye opd by her parents with complain of whitish pupillary reflex. She was diagnosed with retinoblastoma which was limited to eye ball occupying more than half of the vitreous volume and not invading the optic nerve. The most appropriate treatment option is
 - a. Evisceration
 - b. Exenteration
 - c. Chemotherapy
 - d. Radiotherapy
 - e. Enucleation
3. The most common primary orbital malignancy in childhood is
 - a. Rhabdomyosarcoma
 - b. Optic nerve sheath meningioma
 - c. Capillary hemangioma
 - d. Neuroblastoma
 - e. Lacrimal gland carcinoma

Sample Paper SEQs

1. A 25 year's old, male presented in the emergency department with the complaint of spillage of acid in his right eye. On examination of the right eye, his corneal epithelium was swollen and opaque. You are suspecting an ocular chemical injury.
 - a. What will be your immediate management of this case? (02)
 - b. Write Roper-Hall grading of the chemical injury? (02)
 - c. Write two long term complication of the chemical injury? (01)
2. A 45 years old man presents to the OPD with complains of right sided ocular discomfort and painful rash involving the right peri-orbital region for the past 4 days. Examination reveals tender, vesicular rash involving the right sided forehead and upper lid which respects the midline. Slit lamp examination reveals microdendritic ulcers on the cornea. Rest of the ocular examination is unremarkable.
 - a. Based on the history and examination, the most probable diagnosis in this patient would be? (1)
 - b. What would be a suitable management plan for this patient? (3)
 - c. State two neurological complications that can be associated with this condition? (1)
3. A 52 years old female presents to the ER with excruciating pain in the right eye and decreased vision in the right eye for the past 1 hour. She states that she is seeing "halos" around light and is also feeling extremely nauseous. Examination reveals severe circumciliary congestion with vertically oval, mid-dilated pupil that is poorly reactive to light. Applanation tonometry reveals IOP of 50mmHg
 - a. Based on these findings, the most probable diagnosis in this case would be? (1)
 - b. What would the treatment plan for this patient? (2)
 - c. What are the options to prevent such attacks in future in this patient? (2)
4. A diabetic patient presents to eye OPD with complaint of gradual decrease in vision of his both eyes particularly effecting His central vision. His best corrected visual acuity is 6/36 and 6/18 respectively in both eyes. On detailed fundus examination of both eyes there are multiple dot blot and flame shaped hemorrhage in all quadrant along with clinically significant macular edema.
 - a. What investigations you would like to do that in patient? (1)
 - b. What treatment modalities are available currently for this disease? (2)
 - c. What other complications can develop in this patient? (2)

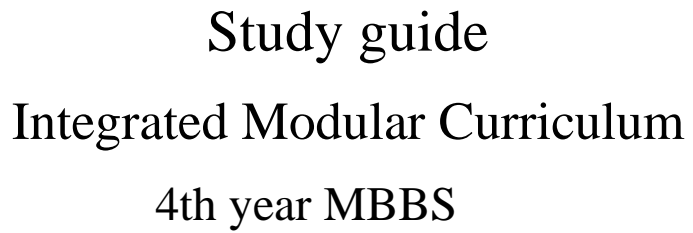
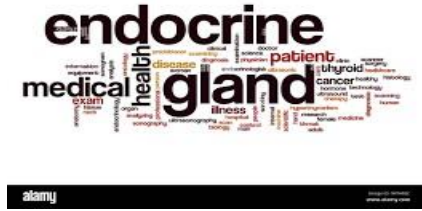


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1- Endocrinology Module Team

Module committee			Module task force team		
1.	Vice Chancellor RMU	Prof. Dr. Muhammad Umar	1.	Coordinator	Dr. Sana Bilal Dr. Imrana Saeed
2.	Director DME	Prof. Dr. Rai Muhammad Asghar	2.	DME focal person	Dr Maryum Batool
3.	Convener Curriculum	Prof. Dr. Naeem Akhter			
4.	Dean Basic Sciences	Prof. Dr. Ayesha Yousaf			
5.	Additional Director DME	Prof. Dr. Ifra Saeed			
6.	Associate Dean	Dr Asma Khan			
7.	Chairperson Community Medicine	Prof. Dr. Arshad Sabir		DME Implementation Team	
8.	Focal Person Pharmacology	Dr.Zunera Hakim	1.	Director DME	Prof. Dr. Rai Muhammad Asghar
9.	Focal Person Community Medicine	Dr. Sana Bilal	2.	Add. Director DME	Dr Asma Khan
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			4.	Module planner & Implementation coordinator	Dr. Omaima Asif
			5.	Editor	Dr. Omaima Asif

Module Preparation team

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Coordinator

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Co-Coordinator IMC

2-University Motto, Vision, Values & Goals

Mission Statement

To impart evidence-based research-oriented health professional education in order to provide best possible patient care and inculcate the values of mutual respect, ethical practice of healthcare and social accountability.

Vision and Values

Highly recognized and accredited center of excellence in Medical Education, using evidence-based training techniques for development of highly Competent health professionals, who are lifelong experiential learner and are socially accountable.

Goals of the Undergraduate Integrated Modular Curriculum

The Undergraduate Integrated Learning Program is geared to provide you with quality medical education in an environment designed to:

- i. Provide thorough grounding in the basic theoretical concepts underpinning the practice of medicine.
- ii. Develop and polish the skills required for providing medical services at all levels of the Health care delivery system in future life.
- iii. Kindle a spirit of inquiry and acquisition of knowledge to help you attain personal and professional growth & excellence.

Introduction to Endocrinology Module

Introduction:

Endocrinology module provides integration of core concepts that underlie the foundation of basic sciences and their use in clinical medicine. This will eventually lead to developing critical thinking for integration and application of basic knowledge for clinical application.

Rationale:

System based learning structure is adopted. The Endocrinology module is designed to impart basic knowledge. This knowledge will serve as a base on which the student will construct further knowledge about the etiology, pathogenesis, prevention of diseases and the principles of their therapeutics and management.

Module outcomes:

Knowledge

Each student will be able to acquire knowledge about the basic concepts of diseases in the community, use technology based medical education and to appreciate concepts & importance of

- Research
- Biomedical ethics
- Family medicine
- Artificial Intelligence

Skills

Interpret and analyze various practical & practices of clinical sciences.

Attitude

Demonstrate a professional attitude. Team building spirit and good communication skills.

This module will run in 4 weeks. The content covered will be made visible through introductory titles of the teaching sessions. Instructional strategies are given in the timetable and learning objectives are briefed in study guides. Study guides will also be available on university websites.

3-Terms & Abbreviations

Contents

- Domains of Learning
- Teaching and Learning Methodologies/Strategies
 - ✦ Large Group Interactive Session (LGIS)
 - ✦ Small Group Discussion (SGD)
 - ✦ Self-Directed Learning (SDL)
 - ✦ Case Based Learning (CBL)
 - ✦ Peer assisted learning (PAL)
 - ✦ Clinical / skill lab

Tables and figures

- ✦ Table1. Domains of learning according to Blooms Taxonomy
- ✦ Figure 1. Prof Umar's Model of Integrated Lecture
- ✦ Table 2. Standardization of teaching content in Small Group Discussions
- ✦ Table 3. Steps of taking Small Group Discussions

4- Domains Of Learning According To Blooms Taxonomy

Abbreviations	Domains of learning
C	Cognitive Domain: knowledge and mental skills.
C1	Remembering
C2	Understanding
C3	Applying
C4	Analyzing
C5	Evaluating
C6	Creating
P	Psychomotor Domain: motor skills.
P1	Imitation
P2	Manipulation
P3	Precision
P4	Articulation
P5	Naturalization
A	Affective Domain: feelings, values, dispositions, attitudes, etc
A1	Receive
A2	Respond
A3	Value
A4	Organize
A5	Internalize

5-Teaching and Learning Methodologies / Strategies

Large Group Interactive Session (LGIS)

The large group interactive session is structured format of Prof Umar Model of Integrated lecture. It will be followed for delivery of all LGIS. Lecturer will introduce a topic or common clinical condition and explains the underlying phenomena through questions, pictures, videos of patients, interviews and exercises, etc. Students are actively involved in the learning process.

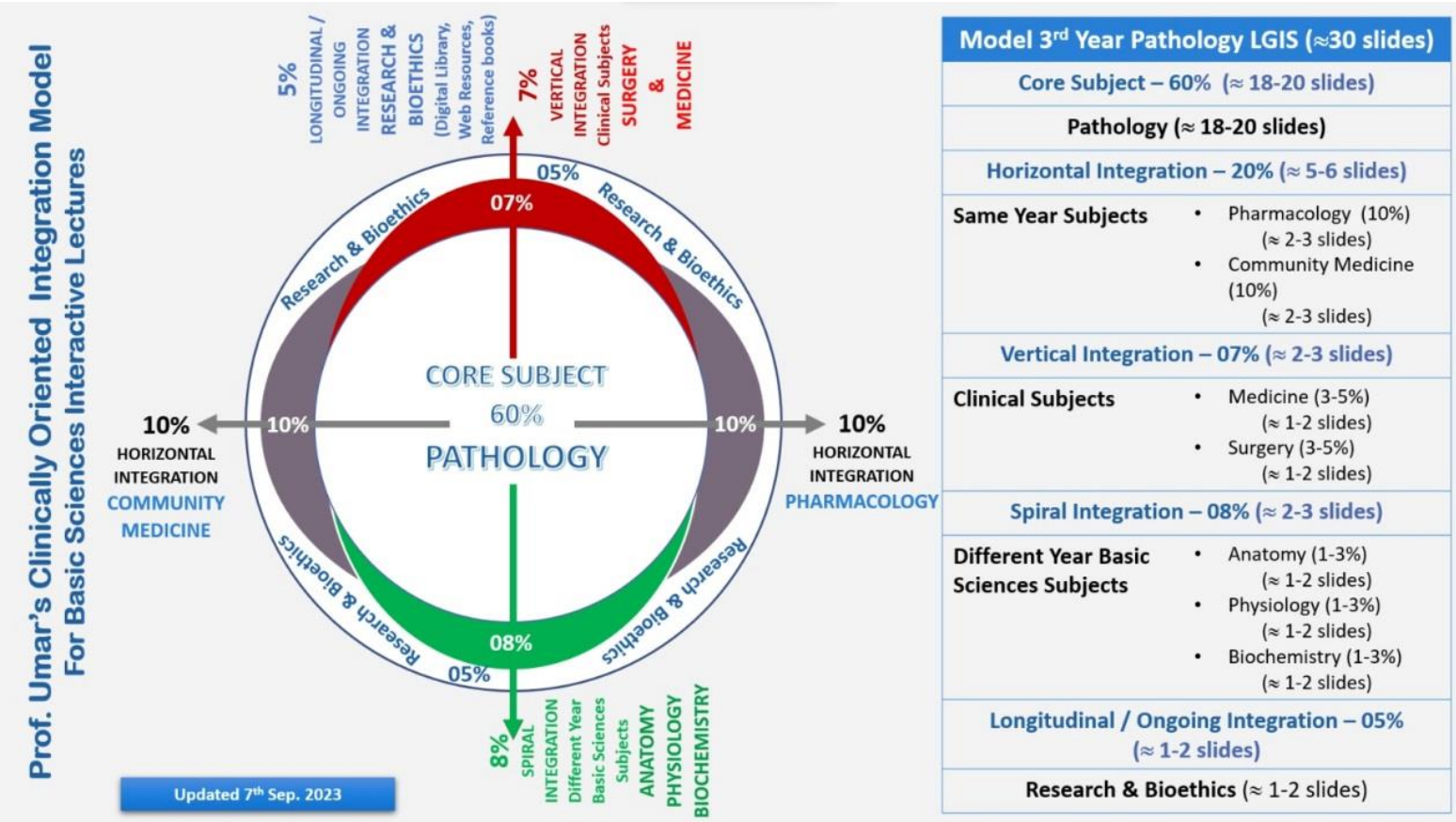


Table 1: Prof Umar's Model of LGIS

6-Small Group Discussion (SGD)

This format helps students to clarify concepts acquire skills and attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics or power point presentations. Students exchange opinions and apply knowledge gained from lectures, SGDs and self-study. The facilitator role is to ask probing questions, summarize and helps to clarify the concepts.

Standardization of teaching content in SGD`s

S. No	Contents	Approximate share in %
1	Title Of SGD	
2	Learning Objectives from Study Guides	
3	Horizontal Integration	5%+5% = 10%
4	Core Concepts of the Topic	70%
5	Vertical Integration	10%
6	Related Advance Research points	3%
7	Biomedical Ethical points	2%
8	Spiral integration	5%

7-Self Directed Learning (SDL)

- Self- directed learning is a process where students take primary charge of planning, continuing, and evaluating their learning experiences.
- Home based / time assignment.
- Learning objectives are briefed in study guide
- Learning resources including pages, book names etc or link / web site
- Assessment: it will be online on LMS on a predefined schedule

Case Based Learning (CBL)

- It's a learner centered model which engages students in discussion of specific scenarios that resemble typically are real world examples.
- Case scenario will be given to the students
- Will engage students in discussion of specific scenarios that resemble or typically are real-world examples.

8-Learning Objectives, Teaching Strategies & Assessments

Learning objectives are given to the students and will be based on:

- Purpose to provide students with a relevant opportunity to see theory in practice • Require students to analyze data in order to reach a conclusion.
- Develop analytic, communicative and collaborative skills along with content

Contents of the Module

1. Horizontally Integrated Basic Sciences (Physiology, Pharmacology, Pathology, Community Medicine) 2. Large Group Interactive Session (LGIS):

- i. Pathology
- ii. Community Medicine
- iii. Pharmacology
- iv. Medicine
- v. Surgery
- vi. Gynae & Obs vii. pediatrics

3. Small Group Discussions (SGD)

- i. Pathology
- ii. Community Medicine
- iii. Pharmacology

4. Self-Directed Topic, Learning Objectives & References (SDL)

- i. Pathology
- ii. Community Medicine
- iii. Pharmacology

5. PAL

Community medicine

6. Skill Lab

- i. Pathology
- ii. Pharmacology

7. CBL

- i. Pathology
- ii. Pharmacology

8. Wards, operation theatres

- i. Surgery
- ii. Medicine
- iii. Gynae& obs

Learning Objectives Of Pathology (LGIS)

Topic	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives After The Session Students Will Be Able To:	Learning domain	Teaching strategy	Assessment tool
Hypothyroidism and Thyroid Tumors	<ul style="list-style-type: none"> Pathophysiology of thyroid gland Introduction types ,causes &sign symptoms of hypothyroidism Pathophysiology of Hashimoto's Thyroid function test 	The students should be able to 1) to explain hypothyroidism 2)classify and explain benign and malignant neoplasms of thyroid	C2 C2	LGIS	MCQs, SEQs, OSPE Viva
Hyperthyroidism	<ul style="list-style-type: none"> Introduction types ,causes &sign symptoms of hyperthyroidism Pathophysiology of Grave's disease Thyroid function test 	The students should be able to 1)compare and differentiate between hyperthyroidism and hypothyroidism 2)to describe pathophysiology of graves' disease.	C3	LGIS	MCQs, SEQs, OSPE Viva
Diabetics mellitus	<ul style="list-style-type: none"> Introduction ,classification & causes of Diabetes Mellitus Plasma glucose regulation Pathophysiology of DM Investigation for DM 	<ul style="list-style-type: none"> Students should be able to 1) classify Diabetes Mellitus 2) Diagnose, and explain pathogenesis of diabetes along with glucose homeostasis. 	C2 C3 C2	LGIS	MCQs, SEQs, OSPE Viva
Adrenal Gland/ Hyperadrena lism	<ul style="list-style-type: none"> Introduction to hyperadrenalism Types Investigation of hyperadrenalism 	Students should be able to 1)explain pathophysiology of cushing syndrome 2) explain the pathophysiology of hyperaldosteronism and adrenogenital syndromes	C2 C3	LGIS	MCQs, SEQs, OSPE Viva
Hypoadrenalism and adrenal tumors	<ul style="list-style-type: none"> Introduction to hypoadrenalism Types Investigation of hypoadrenalism 	Students should be able to 1) describe the pathophysiology of addisons disease and other hypoadrenal disorders 2)To describe the pathophysiology and microscopic features for diagnosis of adrenal cortical adenoma and carcinoma	C2, C3	LGIS	MCQs, SEQs, OSPE Viva

Learning Objectives Of Community Medicine (LGIS)

Topic	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives After The Session Students Will Be Able To:	Learning domain	Assessment tool
Non-Communicable Disea (Hypertension)	Epidemiology of hypertension	<ul style="list-style-type: none"> Differentiate between communicable and non-communicable diseases Describe the risk factors and their importance in causation of Hypertension. 	C2	MCQs, SEQs, OSPE Viva
	Prevention of hypertension	<ul style="list-style-type: none"> Apprehend the disease burden of Hypertension 	C2	
	Classification	<ul style="list-style-type: none"> Classify hypertension 	C2	
	Rules of halves	<ul style="list-style-type: none"> Elaborate the rule of halves Recommend approaches to prevention and control of hypertension 	C2	
			C3	
Non-Communicable Disea (Diabetes, obesity)	Epidemiology of diabetes & obesity	<ul style="list-style-type: none"> Describe the risk factors and their importance in causation of diabetes & obesity 	C2	
	•Prevention & control of diabetes & obesity	<ul style="list-style-type: none"> Apprehend the burden of diabetes & in Pakistan 	C2	
	Classification of diabetes & obesity	<ul style="list-style-type: none"> Classify diabetes & obesity 	C2	
	Obesity assessment	<ul style="list-style-type: none"> Define obesity Measure obesity via different methods of obesity assessment 	C3	
	Body mass index	<ul style="list-style-type: none"> Calculate body mass index and interpret the results Recommend approaches to prevention and control of diabetes and obesity in community 	C3	
Non-Communicable Diseases III (Cancer)	Epidemiology of cancers	<ul style="list-style-type: none"> Differentiate categories of cancers 	C2	MCQs, SEQs, OSPE Viva
	Prevention & control of cancers	<ul style="list-style-type: none"> Identify epidemiology of cancers 	C2	
	Warning signs of cancer	<ul style="list-style-type: none"> recommend the approaches for prevention of cancers in the community 	C3	
Health care delivery system I	Objectives, components & models of Health care system	<ul style="list-style-type: none"> Define health system 	C1	MCQs, SEQs, OSPE Viva
		<ul style="list-style-type: none"> Enlist health system models 	C1	
		<ul style="list-style-type: none"> Comprehend components of healthcare delivery system 	C2	
		<ul style="list-style-type: none"> Illustrate the functions and objectives of health system 	C2	
Health care delivery system II Health care delivery system of Pakistan	Levels and functions of healthcare system Tires & functions of healthcare system of Pakistan	<ul style="list-style-type: none"> Describe the levels of health care system 	C2	MCQs, SEQs, OSPE Viva
		<ul style="list-style-type: none"> Elaborate the healthcare services available at all levels of healthcare system 	C2	
		<ul style="list-style-type: none"> Describe the tires of health care system of Pakistan 	C3	
		<ul style="list-style-type: none"> Discuss the functions of healthcare system of Pakistan 	C2	
Adolescent health	Normal adolescent development management of adolescent related health issues	<ul style="list-style-type: none"> Discuss normal adolescent development, its impact on health 	C2	MCQs, SEQs, OSPE Viva
		<ul style="list-style-type: none"> Counselling of adolescents with specific conditions 	C2	
		<ul style="list-style-type: none"> Identification of normal growth and pubertal development 	C2	
		<ul style="list-style-type: none"> Manage common health &mental health conditions, nutrition-related disorders 	C3	
		<ul style="list-style-type: none"> Identify signs of substance use and substance use disorders 	C2	

Learning Objectives Of Pharmacology (LGIS)

Topic	Contents Outlines (Major Topics & Sub-Topics)	Learning objectives	Learning domain	Assessment tool
Anti-thyroid Drugs I	Thyroid preparations	<ul style="list-style-type: none"> Describe different Thyroid Preparations Describe the drugs that block each step of thyroid hormone synthesis • Classify Anti-thyroid Drugs 	C1 C2 C2	MCQ/SEQ
Anti-thyroid Drugs II	Mechanism of action Adverse effects Use of beta blockers in hypothyroidism	<ul style="list-style-type: none"> Describe the mechanism of action & adverse effects of the groups of anti-thyroid drugs Explain the use of Beta Blockers in the treatment of Hyperthyroidism Enumerate the uses of Anti-thyroid Drugs Explain the rationale for use of different drugs in thyroid storm 	C2 C2 C2	MCQ/SEQ
Drugs that affect Bone Mineral Homeostasis I	principal hormonal regulators pharmacokinetics and pharmacodynamics of Vitamin D	<ul style="list-style-type: none"> Enumerate principal hormonal regulators of bone mineral homeostasis Explain pharmacokinetics and pharmacodynamics of Vitamin D Enumerate non hormonal agents affecting bone mineral homeostasis 	C2 C2 C2	MCQ/SEQ
Drugs used in Diabetes I	Oral hypoglycemics Sulfonylureas meglitinides	<ul style="list-style-type: none"> Classify Oral Hypoglycemic Describe the mechanism of action of Sulfonylureas Compare first and second generation Sulfonylureas Describe adverse effects of sulfonylureas Describe the mechanism of action of Meglitinides Compare Sulfonylureas & Meglitinides 	C2 C2 C2 C2 C2 C2	MCQ/SEQ
Drugs used in diabetes II	Biguanides Alpha-glucosidase inhibitors Thiazolidinediones Amylin analogs	Discuss mechanism of action & adverse effects of Biguanides Differentiate between Sulfonylureas and Biguanides Discuss the mechanism of action & adverse effects of Alpha-Glucosidase Inhibitors Discuss the mechanism of action & adverse effects of Thiazolidinedione Describe the mechanism of action & adverse effects of Amylin analogs Describe the mechanism of action & adverse effects of GLP-1 analogs and Gliptins Discuss uses of Oral Anti-diabetics	C2 C2 C2 C2 C2 C2 C2	MCQ/SEQ
Drugs used in diabetes III	Insulin	<ul style="list-style-type: none"> Classify Insulins Compare animal & human insulins Discuss kinetics of different insulins with clinical significance Describe uses & adverse effects of Insulins Describe insulin resistance 	C1 C2	MCQ/SEQ
Corticosteroid I	Classification Mechanism of action	<ul style="list-style-type: none"> Classify corticosteroids Describe the mechanism of action of 	C1	MCQ/SEQ
	Uses	corticosteroids <ul style="list-style-type: none"> Describe the actions of glucocorticoids Describe the Uses of Corticosteroids 	C2	
Corticosteroid II	Adverse effects contraindications	<ul style="list-style-type: none"> Describe the adverse effects of Corticosteroids Justify the tapering off of corticosteroids Describe the contraindications of corticosteroids 	C2 C3 C2	MCQ/SEQ

Small Group Discussion – Pathology (SGDs)

Demonstration	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives	Learning domain	Teaching strategy	Assessment tool
Disorders of Post-Pituitary Hormones	Introduction to post pituitary gland and hormones secreted Diseases /disorders of post pituitary gland Investigations	Students should be able to explain hypopituitarism and posterior pituitary gland diseases	C2	SGD	MCQs, SEQs, OSPE Viva
Parathyroid Disorders	Introduction to parathyroid disorders and its Investigations	Students should be able to explain Parathyroid Disorders, clinical features and pathophysiology	C2 C3	SGD	MCQs, SEQs, OSPE Viva
Parathyroid Adenoma/carcinoma	Introduction to parathyroid adenoma /carcinoma, clinical features, pathophysiology and its Investigations	Students should be able to explain Parathyroid Adenoma/carcinoma, clinical features and pathophysiology	C2 C3	SGD	MCQs, SEQs, OSPE Viva
Pancreatic tumors, Neuroendocrine	Introduction to Pancreatic tumors, Neuroendocrine, clinical features, pathophysiology and its Investigations	Students should be able to explain Pancreatic tumors, Neuroendocrine diseases	C2 C3	SGD	MCQs, SEQs, OSPE Viva
Disorders of Adrenal medulla & MEN Syndrome	Introduction to adrenal medulla gland Diseases /disorders of adrenal medulla Features of MEN,S syndrome Investigations	Students should be able to describe the pathophysiology and microscopic features of pheochromocytoma to explain the diagnostic features of MEN 1 and MEN 2 syndromes.	C2 C3	SGD	MCQs, SEQs, OSPE Viva

Small Group Discussion - Community Medicine (SGDs)

Topic	Contents Outlines (Major Topics & Sub-Topics)	Learning objectives At the end of session student will be able to:	Learning domain	Assessment tool
Health programs of Pakistan	Various primary healthcare programs	<ul style="list-style-type: none"> • Explain program and National Health programs. • Elaborate important national health programs • Enlist important National Health programs • Discuss the key points regarding National Program for family planning and primary healthcare, EPI, AIDs Control program, Hepatitis control 	C2 C2 C1 C3	MCQs, SEQs, OSPE and Viva Voce

Small Group Discussion Pharmacology (SGD)

Topic	Learning objectives At the end of sessions student will be able to:	Learning domain	Assessment tool
Mineralocorticoid Antagonist	<ul style="list-style-type: none"> • Enumerate mineralocorticoid antagonists • Describe the mechanism of action of mineralocorticoid antagonists 	C2 C2	MCQ

Case Based Learning Pathology CBL

Topic	Contents Outlines (Major Topics & Sub-Topics)	Learning objectives At the end of session students will be able to:	Learning Domain	Assessment tool
Complications of Diabetes Mellitus	Pathophysiology diagnosis and complications of diabetes mellitus	<ul style="list-style-type: none"> Describe in detail the complications, pathological findings and organ involvement in diabetes Explain the lab investigations required to diagnose diabetes 	C2 C2	MCQs
Pineal gland	Pathophysiology , functions, diagnosis and investigations	<ul style="list-style-type: none"> Describe in detail the pathological findings Explain the lab investigations required for diagnose 	C2 C2	MCQs

Case Based Learning Pharmacology CBL

Topic	Learning objectives At the end of session student will be able to:	Learning Domain	Assessment tool
Hypothyroidism	<ul style="list-style-type: none"> Describe different Thyroid Preparations Describe the drugs that block each step of thyroid hormone synthesis 	C2 C2	PBQ
Corticosteroid	<ul style="list-style-type: none"> Classify corticosteroids Describe the mechanism of action of corticosteroids Describe the actions of glucocorticoids Describe the Uses of Corticosteroids Describe the adverse effects of Corticosteroids Justify the tapering off of corticosteroids Describe the contraindications of corticosteroids 	C2 C2 C2 C2 C2	PBQ
Diabetes mellitus	<ul style="list-style-type: none"> Classify the drugs used in the management of DM Identify the drug group preferred in the given case 	C2 C3	

Skill Lab Pathology

TOPIC	Contents Outlines (Major Topics & Sub-Topics)	Learning objectives At the end of session student will be able to:	Learning Domain	Assessment tool
Thyroiditis, Multinodular goiter	Classify and identify various types of thyroiditis & Multinodular goiter	<ul style="list-style-type: none">Classify different types of thyroiditisIdentify gross features and microscopic features such as Massive lymphoplasmacytic infiltration with lymphoid follicles formation and large active germinal center in Hashimoto's thyroiditisExplain the gross features asymmetrically enlarged gland with Irregular nodules and microscopic features such as varied sized dilated follicles with hyperplastic epithelium in multinodular goiter and grave's diseaseIdentify microscopic features such as closely packed small follicles lined by cuboidal epithelium, within a fibrous capsule in follicular adenomaIdentify gross and microscopic features as complex, branching, randomly oriented papillae with fibrovascular cores and specific nuclear features in papillary carcinoma of thyroid	C1 C2 C2 C2	OSPE/OSCE
Chronic pancreatitis & pancreatic carcinoma	Pancreatic pathologies and differences between them	<ul style="list-style-type: none">Identify and explain the gross and microscopic features of chronic pancreatitisDifferentiate between normal pancreas and pancreatic adenocarcinoma /pancreatic carcinoma. Differentiate between pancreatic carcinoma and chronic pancreatitis	C2 C3 C3	OSPE/OSCE
Parathyroid adenoma/carcinoma	Pathogenesis of parathyroid adenoma	<ul style="list-style-type: none">Identify and explain the gross and microscopic features of pituitary adenoma Identify and explain the gross and microscopic features of parathyroid adenoma and how to differentiate it from carcinoma	C2 C2,C3	OSPE/OSCE

Skill Lab Pharmacology

Code	TOPIC	Learning objectives At the end of session student will be able to:	Learning domain	Assessment tool
Practical	P-Drug & Prescription writing	P -Drug and prescription writing on <ul style="list-style-type: none"> • Diabetes Mellitus type II • Graves Disease • Adrenal Insufficiency 	C2	OSPE

Self-directed learning session Self-Directed Learning (SDL) Pathology

SR. NO.	TOPIC	LEARNING OUTCOMES At the end of session students will be able to:	REFERENCE
01	contributions of the endocrine system to homeostasis	<ul style="list-style-type: none"> • The student should be able to: • Describes the effects of endocrine system on homeostasis. 	Robin Basic Pathology 10 th Edition Chapter Endocrine System Page: 749
02	Summarize the site of production, regulation, thyroid gland	<ul style="list-style-type: none"> • Discuss steps of production and regulation of Thyroid hormone 	Robin Basic Pathology 10 th Edition Chapter Endocrine System Page: 755 – 756
03	Investigations of a case of goiter	<ul style="list-style-type: none"> • Know basic laboratory investigations of a case of Goiter 	Robin Basic Pathology 10 th Edition Chapter Endocrine System Page: 762 – 763
04	Investigations of Diabetes Mellitus	<ul style="list-style-type: none"> • Know basic laboratory investigations of a case of Diabetes Mellitus 	Robin Basic Pathology 10 th Edition Chapter Endocrine System Page: 772

Self-Directed Learning Pharmacology SDL

SR. NO	TOPIC	LEARNING OUTCOMES At the end of session students will be able to:	REFERENCE
1	Post covid incidence of thyroid diseases and their pharmacological treatment	<ul style="list-style-type: none"> define hypothyroidism Corelate lab results of thyroid function tests and patient's symptoms Discuss pathophysiology of thyroid disease in association with covid Discuss the role of drugs used for hypothyroidism in post covid patients 	<p>Thyroid and COVID-19: a review on pathophysiological, clinical and organizational aspects https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7992516/#:~:text=Thyroid%20and%20COVID%2D19%3A%20a%20review%20on%20pathophysiological%2C%20clinical%20and%20organizational%20aspects</p> <p>The Association Between COVID-19 and Thyroxine Levels: A Meta-Analysis https://www.frontiersin.org/articles/779692</p>
2	Bisphosphonates and bone mineral diseases	<ul style="list-style-type: none"> Classify drugs used for bone mineral diseases Describe mechanism of action and uses of bisphosphonates Describe adverse effects of bisphosphonates 	<p>The Effect of Bisphosphonates on Fracture Healing Time and Changes in Bone Mass Density: METAAnalysis https://www.frontiersin.org/articles/10.3389/fendo.2021.688269/full#:~:text=10.3389/fendo.2021.688269-,The%20Effect%20of%20Bisphosphonates%20on%20Fracture%20Healing%20Time%20and%20Changes%20in%20Bone%20Mass%20Density%3A%20A%20Meta%2DAnalysis,A%20Multicenter%20Observational%20Cohort%20Study%20to%20Evaluate%20the%20Effects%20of%20Bisphosphonate%20Exposure%20on%20Bone%20Mineral%20Density%20and%20Other%20Health%20Outcomes%20in%20Osteogenesis%20Imperfecta https://asbmr.onlinelibrary.wiley.com/doi/abs/10.1002/jbm4.10118</p>
3	Nuclear receptors coactivators	<ul style="list-style-type: none"> Descried Steroid receptor signaling mechanisms Discuss the role of coactivators in steroid receptor functioning Enumerate the drugs acting through steroid receptor activation 	<p>Nuclear Integration of Glucocorticoid Receptor and Nuclear Factor-κB Signaling by CREB-binding Protein and Steroid Receptor Coactivator-1* https://www.jbc.org/article/S0021-9258(19)59316-4/fulltext#:~:text=Nuclear%20Integration%20of%20Glucocorticoid%20Receptor%20and%20Nuclear%20Factor%2D%CE%BA%20Signaling%20by%20CREB%2Dbinding%20Protein%20and%20Steroid%20Receptor%20Coactivator%2D1%2A</p>

4	DPP-4 INHIBITORS AND PANCREATIC CARCINOMA		<p>Dipeptidyl Peptidase-4 Inhibitor–Associated Pancreatic Carcinoma</p> <p>https://journals.sagepub.com/doi/abs/10.1177/1060028015610123?journalCode=aopd#:~:text=Dipeptidyl%20Peptidase%2D4%20Inhibitor%E2%80%93Associated%20Pancreatic%20Carcinoma</p>
			<p><u>Risk of dipeptidyl peptidase- 4(DPP-4) inhibitors on site- specific cancer: A systematic review and meta-analysis</u></p> <p>https://onlinelibrary.wiley.com/doi/abs/10.1002/dmrr.3004</p>

Self-Directed Learning community medicine (SDL)

#	Topics	Learning objectives. Students will be able to ...	Learning resource
1	Epidemiology of Stroke	<ul style="list-style-type: none"> Describe problem statement of stroke. Risk factors of stroke Strategies for stroke control in population 	K Park Ed. 27 th (377-78)
2	Epidemiology of Rheumatic Heart disease (RHDs)	<ul style="list-style-type: none"> Describe problem statement of RHDs. Epidemiological factors of RHDs. WHO criteria for diagnosis of RHDs Approaches for Prevention of RHDs in population 	K Park Ed. 27 th (378-81)
3	Intro to selected important relevant concepts of sociology relevant to epidemiology & medical research	<ul style="list-style-type: none"> Comprehend definitions of, Society, community, social structure & institution, social control mechanisms, Comprehend customs, culture, social problems, social pathology, case study & field study. 	K Park Ed. 27 th (67073)

Peer Assisted Learning (PAL) IUGRC Contact Session Contact Session III Time Duration; 2hrs/batch

Indicators of accomplishment Prior readings / assigned work	Learning objectives/ competencies	Learning outcomes By the end of lecture student will be able to:	Assessment strategy
<p>Endo session 1 Finalization of questionnaire and layout of work plan (Gantt chart) Development & finalizing; Study variables, data analysis plan, use of relevant statistical measures, data collection tool development, addressing ethical aspects of SGRP and preparing Gantt chart</p> <p>Endo session 2 Data Collection (Pilot Project) Demonstrate</p> <ul style="list-style-type: none"> - Needed skills & behavior for data collections, - How addresses logistic & field issues - How perform data cleaning, feeding, and organizing skills - Proper Use Computer skills & soft ware 	<ul style="list-style-type: none"> • Identify relevant and statistically appropriate study variables. • Develop appropriate data analysis plan, • Decide use of relevant statistical tests • Decide sampling method & calculate sample size • Develop data collection tool & decide data collection technique - Apply principles of research ethics in SGRP specifically informed consent, confidentiality of information Practice right skills & behavior while collecting data from human subjects or form healthcare practicing sites or form population settings - Organizing and analyzing data collected - Interpreting and inferring on pre-determined study objectives like frequency of disease, variables suitability, pilot test of questionnaire 	<ul style="list-style-type: none"> • Finalize study variables, data analysis plan, application of relevant statistical tests • Appreciate relevant sampling and data collection technique • Finalize data collection tool / questionnaire according to study objectives and variables and in accordance to information required from target respondents • Develop Gantt chart for study timeline • Develop informed consent form for the SGRP study <p>By the end of session 2, students should be able to;</p> <ul style="list-style-type: none"> -compile & interpret pilot study data -make observable improvements or changes in data collection skills & behaviors if required -Record take measures to address logistic issues reported like lack of equipment ,facilities ,need assessment for prior data collection training , poor quality assurance, language barriers , systematic errors 	<p>MCQ in each block exam Viva exam at the end of the session</p>

	<div>validity and reliability ,subject coordination or response rate, margin for attrition / sample size</div> <ul style="list-style-type: none">• Take measures to address logistic and other issue faced if any	<div>-Address ethical concerns of study if any encounter during pilot project</div>	
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VERTICALLY INTEGRATED CLINICAL SUBJECTS

Learning Objectives Of Surgery (LGIS)

Topic Of The Session	Contents Outlines (Major Topics & SubTopics)	Learning Objectives At the end of session student will be able to:	Learning Domain	Assessment tools
Surgical intervention of parathyroid gland	Surgical anatomy of parathyroid gland, managing patient with parathyroid pathology	<ul style="list-style-type: none"> Discuss the surgical anatomy of parathyroid gland Enlist diseases treatable with surgery Discuss briefly parathyroid adenoma, hyperplasia and carcinoma Outline pre-operative work up for parathyroid gland Approach towards a patient with parathyroid pathology. 	C2 C1 C2 C2 C2	MCQ/SEQ
Surgical intervention of pancreatic tumor	Surgical diseases of pancreas and their management	<ul style="list-style-type: none"> Discuss the surgical anatomy of pancreas Explain the prevention of pancreatic tumors Enlist the surgical diseases of pancreas Approach towards a patient with suspected SOL in pancreas Do pre-operative preparation of patient with SOL Elaborate the protocol for surgery of distal pancreas 	C2 C2 C1 C3 C2	MCQ/SEQ
Surgical intervention of adrenal gland	Surgical anatomy and surgical intervention of adrenal gland	<ul style="list-style-type: none"> Discuss the surgical anatomy of adrenal gland Approach adrenal towards a patient with incidental SOL in gland Describe pheochromocytoma Illustrate pre-operative workup for pheochromocytoma Prepare a patient for pheochromocytoma Discuss Surgical procedure for pheochromocytoma including minimally invasive surgery 	C2 C2 C2 C2 C3 C2	MCQ/SEQ

Learning Objectives Of Medicine (LGIS)

Topic Of The Session	Contents Outlines (Major Topics & SubTopics)	Learning Objectives At the end of session student will be able to:	Learning Domain	Assessment tools
Acromegaly	Clinical features & investigations of acromegaly along with its management	<ul style="list-style-type: none"> Identify clinical presentation and physical findings in acromegaly. Describe laboratory workup of acromegaly. Explain various therapeutic options in management of acromegaly Recall clinical conditions associated with acromegaly. 	C2 C2 C2 C2	MCQ/SEQ
Diabetes Insipidus	Clinical features & management of diabetes insipidus	<ul style="list-style-type: none"> Explain the clinical presentation and physical findings in DI. Differentiate between central DI and nephrogenic DI and describe etiology of both types. Describe importance of water deprivation test in diagnosis and differentiation between both types of DI Discuss various treatment options available for management of diabetes insipidus. 	C2 C3 C2 C2	MCQ/SEQ
Hypothyroidism	Causes, C/F , investigations, treatment & complications of hypothyroidism	<ul style="list-style-type: none"> Define hypothyroidism Discuss Causes of hypothyroidism Discuss clinical features (especially congenital hypothyroidism) Discuss lab investigations and their interpretation. Treatment and plan of management Discuss Complications and counseling aspects 	C1 C2 C2 C3 C2 C3	MCQ/SEQ
Hyperthyroidism	Thyroiditis & Grave's disease	<ul style="list-style-type: none"> Compare and differentiate between hyperthyroidism and hypothyroidism Explain thyroiditis and graves' disease. 	C3 C2	MCQ/SEQ

Thyroid Disorders-I	Comparison of hyper and hypo thyroidism	<ul style="list-style-type: none"> Enlist various types of thyroid disorders. Differentiate between clinical features of hyperthyroidism and hypothyroidism. 	C1	MCQ/SEQ
Thyroid Disorders	Graves disease & managing thyroid disorders in pregnancy	<ul style="list-style-type: none"> Describe clinical presentation, diagnosis and management of Grave's disease. Discuss the management plan of thyroid disorders in pregnancy 	C2 C3	MCQ/SEQ
Diabetes and Hypoglycemia		<ul style="list-style-type: none"> Enlist types of diabetes mellitus. Diagnose diabetes mellitus. Develop management plan for diabetes mellitus, including both pharmacological and nonpharmacological therapies. 	C2 C3 C3	MCQ/SEQ
Diabetes Mellitus/DKA I	C/F of diabetic ketoacidosis and its diagnosis	<ul style="list-style-type: none"> Define Diabetes ketoacidosis Discuss its clinical features Plan relevant investigations 	C1 C2 C3	MCQ/SEQ
Diabetes and Hypoglycemia	Managing complication of DM	<ul style="list-style-type: none"> Diagnose and manage complications of diabetes mellitus.(DKA, HONK) Identify clinical features of hypoglycemia and discuss management plan. 	C3 C2	MCQ/SEQ
Diabetes Mellitus/DKA	Managing DKA	<ul style="list-style-type: none"> Discuss complications of diabetes mellitus Discuss treatment and management plan. Outline DKA and its management Counsel the parents. Do follow-up 	C2 C2 C3 C2	MCQ/SEQ
Cushing's Syndrome and Addison's Disease	C/F, diagnosis, causes and management of Cushing's Syndrome and Addison's Disease	<ul style="list-style-type: none"> Identify clinical presentation of Cushing's disease and describe diagnostic workup and management plan of Cushing's syndrome. Differentiate between Cushing's disease and syndrome. Enlist various causes of Cushing's syndrome Identify causes and clinical features of Addison's disease Differentiate between primary and secondary Addison's disease 	C3 C2 C1 C2 C2	MCQ/SEQ

Learning Objectives Of Obstetrics And Gynecology (LGIS)

Topic Of The Session	Contents Outlines (Major Topics & Sub-Topics)	Learning Objectives	Learning Domain	Assessment tools
Thyroid in pregnancy	C/F of thyroid disorders in pregnancy & management	<ul style="list-style-type: none"> • Enlist thyroid disorders during pregnancy • Illustrate clinical presentation of thyroid disorders in pregnancy • Discuss fetο-maternal effects of thyroid disorder • Discuss the management of these disorders 	C1 C2 C2 C3	MCQ/SAQ
DM in pregnancy	Diagnosing gestational diabetes & its management	<ul style="list-style-type: none"> • Define different types of diabetes during pregnancy • Discuss screening for diagnosis of gestational diabetes • Elaborate management of diabetes 	C1 C2 C2	MCQ/SAQ
Complications of Diabetes & Gestational diabetes	Pathophysiology diagnosis and complications of gestational diabetes	<ul style="list-style-type: none"> • Describe in detail the complications, pathological findings and organ involvement in diabetes and gestational diabetes • Explain the lab investigations required to diagnose diabetes 	C2 C2	MCQ/SEQ

Learning Objectives Of Pediatrics (LGIS)

Topic Of The Session	Contents Outlines (Major Topics & Sub-Topics)	Learning Objectives (At the end of session students will be able to learn)	Learning Domain	Assessment tools
Diabetes Mellitus	Diabetes mellitus and its complications	<ul style="list-style-type: none"> • Explain pathophysiology and clinical presentation of Diabetes Mellitus • Plan relevant investigations • Recognize complications of diabetes mellitus • Manage disease and its complications • Counsel the parents and patient 	C2 C3 C2 C3 C3	MCQ/SAQ
Hypothyroidism	Hypothyroidism and its clinical presentation	<ul style="list-style-type: none"> • Enlist causes • Discuss clinical presentation at various ages • Plan, interpret Investigations and take appropriate action • Treat and counsel the parents • Do follow-up 	C1 C2 C3 C3 C3	MCQ/SAQ

Learning Objectives Of Bioethics (LGIS)

Broad topic	Major syllabus with sub-topics	Learning objectives	Learning domain	Assessment tools	Suggested reading sources
Doctor -patient relationship	Discussion will cover;	At the end of the session students should be able to;		1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination	http://nbc-pakistan.org.pk/assets/may-16bioethicsfacilitator-book---may-16%2c-2017.pdf (page 54)
	• Doctor-patient relationship – Confidentiality – Truth telling /disclosure – Informed consent	<ul style="list-style-type: none"> Discuss the ethical principles applicable within the doctor patient relationship 	C2		
		<ul style="list-style-type: none"> Describe the different types of consent and the situations in which obtaining consent is required 	C2	Result / marks obtained will contribute towards Internal assessment (IA) in 4 th Prof. MBBS exam.	WHO Module for Teaching Medical Ethics to Undergraduate.pdf (page 9)
		<ul style="list-style-type: none"> Recognize the importance of telling the patient the truth about his/ her medical condition 	C2		
		<ul style="list-style-type: none"> justify when it is important to withhold information from a patient/ relative 			
		<ul style="list-style-type: none"> Analyze the doctor's role when there is disagreement between the doctor's view and the views of patient, guardians or relatives 	C3		
		<ul style="list-style-type: none"> Demonstrate understanding of the elements and process of informed consent in research 	C2		

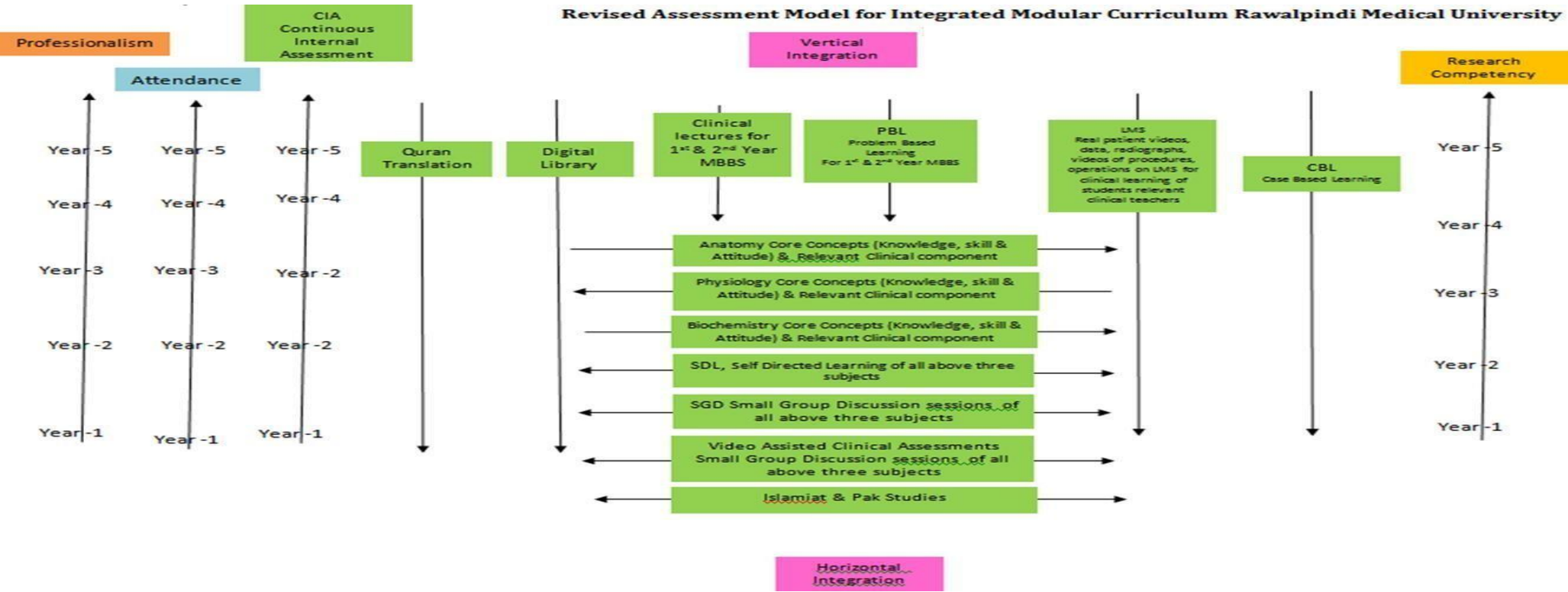
Learning Objectives Of Family Medicine (LGIS)

Broad topic	Major syllabus with subtopics	Learning objectives	Learning domain	Assessment tools
Core concepts of family medicine in (Noncommunicable diseases)	Discussion will cover; Diabetes mellitus and obesity its psychological impacts on families	At the end of the session students should be able to; <ul style="list-style-type: none">Explain the management strategies of a diabetic patient in general practice including the psychosocial impact of disease on patient and their familiesDescribe the strategies for prevention of diabetes mellitus and its complicationsIdentify the red-flags in a diabetic patient and appropriately refer to specialty care when requiredDescribe the aetiology, risk factors and complications of obesityExplain the role of diet, exercise and anti-obesity drugs in the management of obesity and its complicationsIdentify the red-flags in an obese patient and appropriately refer to specialty care when requiredExplain the psychosocial impact of disease on patient and their families	C3	MCQS
			C2	
			C2	
			C2	
			C2	
			C3	

9- Assessment Policies:

CONTENTS:

- 1. Assessment Plan
- 2. Types of Assessment
- 3. Modular Examinations
- 4. Block examinations



Gauge for Continuous Internal Assessment (CIA)

Red Zone	High Alert	Yellow Zone	Green Zone	Excellent	Extra Ordinary
0 - 25%	26 - *50%	51 - 60%	61 - 70%	71 - 80%	81 - 100%

*50% and above is Passing Marks.

Gauge for attendance percentage

Red Zone	High Alert	Yellow Zone-1	Yellow Zone-2	Green Zone	Excellent
0 - 25%	26 - 50%	51 - 60%	61 - 74%	*75 - 80%	81 - 100%

*75% is eligibility criteria for appearing in professional examination.

10- Assessment Plan

University has followed the guidelines of Pakistan Medical and Dental Council for assessment. Assessment is conducted for SDL, SGD, mid modular, block/module levels.

Types of Assessment:

The assessment is formative and summative.

Formative Assessment: Formative assessment is taken from topics of SDL, SGD (MS TEAM).

Summative Assessment: Summative assessment is taken at the mid modular, modular/block levels. Modular

Examinations

Theory Paper:

There is a module examination at the end of first module. The content of the whole teaching of the module are tested in this examination.

It consists of paper with objective type questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module.

Viva Voce:

Structured table viva voce is conducted including the practical content of the module. Block

Examination

On completion of a block which consists of two modules, there is a block examination which consists of one theory paper, viva and OSPE.

Theory Paper

There is one written paper for each subject. The paper consists of objective type questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module.

Block OSPE: This covers the practical content of whole block.

Assessment

Types of Assessment:

1. Formative
2. summative

Formative Assessment

Formative assessment will be done at the mid of module through LMS at mid of 2nd week. Assessment of clinical lectures will also be on LMS. Tool for this assessment will be one best choice question.

Summative Assessment:

Summative assessment will be taken at the end of module/ block and will be subject wise

Assessment Frequency & Time in Endocrinology Module

Bloc k		endocrinology Module	Type of Assessments		Total Assessments Time		No. of Assessments	
endocrinology module	Sr #	Types of Assessments	Nature of assessment	Assessment Time	Summative Assessment Time	Formative Assessment Time		
	1	Mid Module Examinations (pathology5, Community Medicine5, pharmacology5) (20 MCQs) 20 marks	Formative	20 Minutes	230 minutes (3 hours,50min)	30 Minutes	2-3 Formative	2 Summative
	2	SDL Examinations (2-3) on LMS (10 MCQs) each exam 10 marks	Formative	10 Minutes				
	3	End Module Examinations	Summative	Detailed below				
		Breakup of EOM Assessment						
	i.	Community medicine (2 SEQs and 20 MCQs) 30 marks	Summative	50 Minutes				
	ii.	Pathology (5 SEQ&25MCQs) 50 marks	Summative	60min				
	iii.	pharmacology (6 seq 10 MCQs) 40 marks	Summative	60 Minutes				
	4	iv. Ward test at the end of two weeks rotation in clinical subjects & End of clerkship C med (OSPE) 40 marks	Summative	40-60 minutes				

Types Of Assessment Community Medicine

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Venue	Frequency
1.	MCQ based Test	formative	Weekly SDL test	LMS / MS team	01 x no. of weeks
2.	One best option MCQs test	formative	Mid module during 2 nd week	LMS	01
3.	Theory (MCQ+SEQ) and Viva Exam	Summative	End of module exam	On campus test	01
4.	End of clerkship Exam (OSCE, MCQs, OSPE)	Summative	(OSCE, MCQs, OSPE)	On campus	01

Type Of Assessment Pharmacology Department

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Venue	Frequency
1.	MCQ	formative	Weekly SDL test	LMS	01x no.of weeks
2.	One best option MCQs test	formative	Mid module during 2 nd week	LMS	01
3.	Theory (MCQ+SEQ)	Summative	End of module exam	On campus test	01
	Practical (VIVA)				

Types Of Assessment Pathology Department

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Venue	Remarks
1	MCQ	Formative	Weekly SDL test	LMS	1per wk
2	One best option MCQs test	formative	Mid module during 2nd week	LMS	01
3	MCQ, SEQs, based examination OSPE Viva Exam	summative	End of module /block exam “	On campus test	01

Table of Specification (TOS)

Endocrinology mid-module assessment

Sr. #	Discipline	No. of MCQs	No. of MCQs according to cognitive domain		
			C1	C2	C3
1.	Pathology	5	01	03	01
2.	Community Medicine	5	01	03	01
3.	Pharmacology	5	01	03	01
4.	Vertically integrated subjects	5	01	03	01
	Total	20			

Endocrinology End of Module Assessment

Sr. #	Major subjects of the module to be assessed	No. of MCQs ff each subject	No. of MCQs according to cognitive domain			No. of SAQs (%)		No. of SAQs according to cognitive domain			viva		Total Marks
			C1	C2	C3	No. of items	Marks	C1	C2	C3			
1.	Pathology	25	05	10	10	05	25	1	2	2	20		70
2.	pharmacology	10	03	03	04	06	30	2	3	2	20		60
3.	Community Medicine	20	05	06	09	02	10		1	1	15		50
	Total MCQs Marks	55					65				55		
								Grand Total				175	

11- Timetable

Staff / Human Resource Distribution of Department of Pathology

Sr.no.	Designation	Total number of teaching staff
1	Professor	02
2	Associate professor	02
3	Assistant professor	04
4	Demonstrators	12

Detail of Contact hours (faculty) & contact hours (students)

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty)	Total Hours (Students)	Faculty level
1	LGIS (5). 1hrs each session (half class sessions)	2 x 5= 10 hrs.	5	Professor, associate, and assistant professors
2	SGD (5) approx. 1hrs each session. 1/4 th class	2 x 5= 10hrs.	5	Assistant professors
3	CBL(IUGRC) (2) approx. 1hrs per session. (4 small group sessions. 1session per day)	2 x 4 = 8hrs.	2	Demos (subject specialists) supervised by professional faculties
4	SDL (4)	1 x 4 = 4 hrs.	4	Demos (subject specialists)
		Total: 32hrs	16 hrs	

Categorization Of Modular Content Of Pathology Department

Category A*	Category B**		Category C***		
LGIS	LGIS	SGDs	SDL		CBL
Hypothyroidism and Thyroid Tumors	Adrenal Gland/ Hyperadrenalism	Disorders of Post-Pituitary Hormones	contributions of the endocrine system to homeostasis.		Complications of Diabetes Mellites
Hyperthyroidism	Hypoadrenalism and adrenal tumors	Disorders of Adrenal medulla & MEN Syndrome	Summarize the site of production, regulation, thyroid gland		Pineal gland
Diabetics mellitus		Parathyroid disorders	Investigations of a case of goiter		
		Parathyroid Adenoma /carcinoma	Investigations of Diabetes Mellitus		
		Pancreatic tumors and neuroendocrine disorders			

Category A*: Fundamental & Complex Concepts taken by Professors, Asse Prof and Assistant Professors

Category B**: Intermediate concepts. Exercises. By Professorial faculty and Senior Demonstrators/ subject specialists.

Category C***: Relatively lower complex concepts, exercises/ applications. By Assistant professors, Demonstrators)

Ranking Of The Content Of Community Medicine

Category A*	Category B**	Category C***	
LGIS	LGIS	SDGS	IUGRC SESSIONS (PAL)
Fundamental concepts of epidemiology, prevention & control of non-communicable diseases(NCDs I) risk factors of hypertension, CHD, Stroke	Health systems I	Health programs in Pakistan	Epidemiology of Stroke Finalization of questionnaire and layout of work plan
Fundamental concepts of epidemiology, prevention & control of noncommunicable diseases(NCDs II) diabetes	Health systems II		Epidemiology of Rheumatic Heart disease (RHDs) Endo session 2 Data Collection (Pilot Project
Fundamental concepts of epidemiology, prevention & control of noncommunicable diseases(NCDs III) Cancers	Adolescent health		Intro to concepts of sociology relevant to epidemiology & medical research

Category A*: Fundamental & Complex Concepts taken by Professors, Associate Professors and Assistant Professors Category B**:

Intermediate concepts. Exercises. By Professorial faculty and Senior Demonstrators/ subject specialists.

Category C***: Relatively lower complex concepts, exercises/ applications. By Assistant professors, Demonstrators & senior PGTs)

Staff / Human Resource of Department of Community Medicine

Sr.no.	Designation	Total number of teaching staff
1	Professor	01
2	Associate professor	02
3	Assistant professor	04
4	demonstrators	05
5	PGTs	05

Detail of Contact Hours community medicine (Faculty & Students)

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty)	Total Hours (Students)	Faculty level
1	LGIS (6). 1hrs each session (half class sessions)	2 x 6= 12 hrs.	6	Professor, associate, and assistant professors
2	SGD (2) approx. 2hrs each session. 1/2class	1 x 4= 4 hrs.	4	Demos (subject specialists), Senior PGTs
3	PAL (IUGRC) (1) approx. 2hrs per session. (16 small group sessions. 8 sessions per day)	2 x 16 =32hrs.	2	Demos (subject specialists) supervised by senior faculties
4	SDL (3)	3 x 1 =3 hrs.	3	Demos (subject specialists)
		Total: 51hrs	15hrs	

Human Resource Distribution of Department of Pharmacology

Sr.no.	Designation	Total number of teaching staff
1	Professor	00
2	Associate professor	01
3	Assistant professor	03
4	Demonstrators	07
5	PGTs	0

Detail of Contact hours (faculty) & contact hours (students)

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty)	Total Hours (Students)	Faculty level
1	LGIS (08). 1hrs each session (half class sessions)	2 x 08= 16 hrs. Facilitator x hours	8	Professor, associate, and assistant professors
2	SGD/ (2) approx. 1hrs each session. 1/4 th class	4 x 2= 8 hrs. Facilitator x hours	2	Demos (subject specialists), Senior PGTs
3	Practicals(1) approx. 2hrs per session	2 x 4 =08 hrs. Facilitator x hours	2	Demos (subject specialists) supervised by professional faculties
4	CBL (3)	4 x 3 =12hrs. Facilitator x hours	3	Demos (subject specialists)
		Total: 44	15 hrs	

Categorization Of Modular Content Of Pharmacology Department

Category A*	Category B**		Category C***	
LGIS	PRACTICALS	SDGS/CBLS	SDL	
ALL	ALL	ALL	ALL	

Category A*: Fundamental & Complex Concepts taken by Professors, Associate Professors and Assistant Professors

Category B**: Intermediate concepts. Exercises. By Professorial faculty and Senior Demonstrators/ subject specialists.

Category C***: Relatively lower complex concepts, exercises/ applications. By Assistant professors, Demonstrators

Tentative Time Table 4th Year MBBS-Endocrinology Module 2023

(1st Week)

DATE / DAY		8:00 AM – 9:00 AM		09:00am – 10:00am		10:30am – 12:00pm				12:00pm - 02:00pm				
Monday 29.5.23	Medicine (LGIS)		Community Medicine (LGIS)				CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.							
	Acromegaly		NCDS I, HTN, CHD											
	Odd/ lec hall 1	Even/ lec hall 2	Odd/Lec hall 1		Even/Lec hall 2									
	Dr Sara Mustfa MUI BBH	Dr Mujeeb HFH	Prof Arshad sabir		Dr. Sana Mzhar									
Wednesday 31.5.23	Pathology (SGD)		Medicine (LGIS)											
	Posterior Pituitary Hormones and their Disorders		Diabetes Insipidus											
	lec hall 1 1&2	Lec hall 6&3	Odd/lec hall 1		Even/Lec hall 2									
	DR Fatima, Dr Rabiya Khalid	Dr Aasia, Dr Tayyaba	Dr Sara Mustfa MUI BBH .		Dr Mujeeb HFH									
Thursday 1.6.23	Pathology (LGIS)		Ethics (LGIS)											
	Hypothyroidism and Thyroid Tumors		Informed consent											
	Lec hall 1	Lec hall 2	Lec hall 1		Lec hall 2									
	Prof Mobeena	Prof Wafa	Prof Arshad Sabir		Dr Khola Noreen									
Friday 2.6.23	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM									
	PAL/skill lab		Pathology (LGIS)		Pharmacology (LGIS)		Medicine (LGIS)							
	Community Medicine / Pathology IUGRC Session / Thyroiditis, Multinodular goiter -I		Hyperthyroidism		Anti-thyroid Drugs classification		Thyroid Disorders 1							
	Batch A-H	Batch I-P	Odd/Lec Hall 4	Even/Lec Hall 5	Odd/Lec hall 4	Even/Lec hall 5	Odd/Lec hall 4	Even/Lec hall 5						
	All Demonstrators C Med Dept	Dr Amina Noor Patho Lab	Prof Mobeena	:Prof Wafa	Dr Attiya	:Dr. Zunaira	Dr Sara Mustfa MUI BBH	Dr Mujeeb HFH						
Saturday SEMINAR THYROID	08:00AM – 09:45AM PAL / skill lab Community Medicine / Pathology IUGRC Session / Thyroiditis, Multinodular goiter -II		09:45AM – 10:30 Pharmacology (LGIS) Anti-thyroid Drugs(Mechanism of Action & Adverse Effects)		10:30AM – 11:15AM Pediatrics (LGIS) Hypothyroidism		11:15 BREA K	11:45AM – 12:30PM Medicine (LGIS) Thyroid Disorders II		12:30PM – 01:15PM Gynae (LGIS) Thyroid in Pregnancy		01:15PM – 02:00PM Surgery (LGIS) Surgical Intervention In Thyroid Disease		
	Batch I-P	BatchA-H	Even/ hall 4	Odd/ hall 5	Even// hall 4	odd /hall 5		Even/hall 4	Odd/ hall 5	Even /hall 4	Odd/hall 5	Even/hall 4	Odd/hall 5	
3.6.23	All demonstrators C Med Dept	Dr. Amina Noor	Dr Attiya	: Dr. Zunaira	Dr Assad shabir	Dr.Mudassar Sharif		Dr Sara Mustfa MUI BBH	Dr Mujeeb HFH	Dr Saima Khan	Dr. Ammarah Urooj	Dr Ali kamran	Dr. Sarmad Arsalan	

Tentative Time Table 4 th Year MBBS-Endocrinology Module 2023														(2 nd WEEK)			
DATE / DAY		8:00 AM – 9:00 AM		09:00am – 10:00am		BREAK 10:00AM – 10:30AM	10:30am – 12:00pm				12:00pm - 02:00pm						
Monday 5.6.23	Pharmacology (CBL)		Community Medicine (LGIS)		CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.												
	Hyperthyroidism (Clinical Pharmacology)		NCDs II, obesity, diabetes														
	Hall 1 &2	Hall 3,pharma lab	Odd/Hall 1	Even /Hall 2													
	Dr Haseeba Dr Arsheen	Dr Uzma Dr Zaheer	Dr. Khola	Dr. Affifa													
Tuesday 6.6.23	Pathology (SGD)		Pharmacology (LGIS)														
	Parathyroid Disorders		Drugs that Affect Bone Mineral Homeostasis														
	Hall 1&2	Hall3&patho lab	Odd /Hall 1	Even /Hall 2													
	Dr Tayyaba: Dr Rabiya Khalid	Dr Aasia Dr Fatima	Dr Asma	Dr. Sobia													
Wednesday 7.6.23	Pathology (SGD)		Surgery (LGIS)														
	Parathyroid Adenoma/carcinoma		Surgical Intervention of Parathyroid Gland														
	Hall 1&2	Hall3&patho lab	Odd/hall 1	Even/hall2													
	Dr Tayyaba Dr Rabiya Khalid	Dr Aasia Dr Fatima	Dr Zafar Iqbal DHQ	Dr. Muhammad Iqbal SUI BBH													
Thursday 8.6.23	Pathology (LGIS)		Pharmacology (LGIS)														
	Diabetes Mellitus		Anti-Diabetic drugs (Classification)														
	Odd/Hall 1	Even/Hall 2	Odd/Hall 1	Even/Hall 2													
	Prof Mobeena	Prof Wafa	Dr Asma	Dr. sobia													
Friday 9.6.23	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		11:15AM – 12:00PM										
	SGD / Skill lab		Pharmacology (LGIS)		Medicine (LGIS)		Pediatrics (LGIS)										
	Community Medicine / Pathology Health programs / Chronic Pancreatitis, Pancreatic Carcinoma		Anti-Diabetic Drugs (Parenteral)		Diabetes and Hypoglycemia I		Diabetes Mellitus/DKA I										
	Batch A-H Dr Imrana, Dr Zaira,Dr Ayesha	I-P Dr Lehrasib	Even /hall 5 Dr Asma	Odd /hall 4 Dr. Sobia	Even/hall 5 Dr. Mujeeb HFH	Odd /hall 4 Dr Sara Mustfa MUI BBH	Even/hall 5 Dr Hina Sattar	Odd /hall 4 Dr. Khalid Saheel									
Saturday 10.6.23 SEMINAR DAY	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		11:45AM – 11:45AM BREAK	11:45AM – 12:30PM		12:30PM – 01:15PM		01:15PM – 02:00PM					
	SGD / Skill lab		Pharmacology (LGIS)		Gynae/OBS (LGIS)			Medicine(LGIS)		Pediatrics (LGIS)		Eye (LGIS)					
	Community Medicine / Pathology Health programs / Chronic Pancreatitis, Pancreatic Carcinoma		Oral Hypoglycemics		Diabetes in Pregnancy			Diabetes and Hypoglycemia II		Diabetes Mellitus/DKA II		Complication of EYE in Diabetes Mellitus					
	A-H	I-P	Even /hall 5	Odd /hall 4	Odd /Hall 4	Even/Hall 5		Odd /Hall 4	Even /Hall 5	Even/hall 5	Odd /hall 4	Even/hall 5	Odd /hall 4				
	Dr Imrana, Dr Zaira,Dr Ayesha		Dr Lehrasib	Dr Asma	Dr. Sobia	Dr. Hina Gull	;Dr Asma Khan		Dr Sara Mustfa Mui Bbh	Dr Mujeeb Hfh	Dr Hina Sattar	Dr. Khalid Saheel	Dr Maria	Dr Sulman			

Tentative Time Table 4thYEAR MBBS-Endocrinology Module 2023

(3rdWEEK)

DATE / DAY		8:00 AM – 9:00 AM		09:00am – 10:00am		10:30am – 12:00pm		12:00pm - 02:00pm						
Monday 12.6.23	Community Medicine (LGIS)		Pharmacology (CBL)				CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.							
	Adolescent health		Drugs used in Diabetes (Clinical Pharmacology)											
	Even/Hall 2	Odd/Hall 1	Hall 1&2	Hall 3&CPC Hall										
	Dr Abdul Qudoos	Dr Narjis Zaidi	Dr. Rubina Dr Zoefeshan	Dr. Arsheen Dr Zaheer										
Tuesday 13.6.23	Pathology (SGD)		Surgery (LGIS)											
	Pancreatic tumors		Surgical intervention of Pancreatic Tumors											
	Hall 1& 2	Hall 3&patho lab	Even/Hall 2	Odd/Hall 1										
	Dr Tayyaba Dr Rabiya Khalid	Dr Aasia Dr Fatima	Dr Zafar Iqbal	Dr Umar Qaiser										
Wednesday 14.6.23	Pathology (CBL) Hall 1,2,3,patho lab		Pathology (LGIS) Hall 1&2											
	Complications Of Diabetes Mellitus		Adrenal Gland/Hyperadrenalism											
	Dr Unaiza Dr Fariha	Dr Aiysha, Dr Iqbal	Dr Rabiya Khalid	Dr.Fatima Tu Zahra										
Thursday 15.6.23	Medicine (LGIS)		Surgery (LGIS)											
	Hyperaldosteronism		Surgical Intervention Of Adrenal Gland											
	Even/Hall 2	Odd/Hall 1	Even/Hall 2	Odd/Hall 1										
	Dr Sara Mustafa	Dr Mujeeb	Dr kiran butt HFH SU I	Dr Waqas SUN I HFH										
Friday 16.6.23	08:00am – 09:45am PAL / skill lab		09:45am – 10:30 Medicine (LGIS)		10:30AM – 11:15AM Pathology (LGIS)						11:15AM – 12:00PM Pharmacology(LGIS)			
	Community medicine / Pharmacology IUGRC Session / P-Drug & Prescription writing		Cushing’s Syndrome And Addison Disease		Hypoadrenalism and adrenal tumors		Corticosteroids (Classification)							
	Batch A-H	I-P	Even/Hall 5	Odd/Hall 4		Even/hall 5	Odd/hall 4	Even/hall 5	Odd/hall 4					
	All Demonstrators ,C Med Dept	Dr Uzma, Dr Hasseba	Dr Mujeeb HFH	Dr Sara Mustafa BBH		Dr. Rabbia Khalid	Dr. Fatima Tu Zahra	Dr Zunera	Dr Attiya					
	Saturday 17.6.23	08:00AM – 09:45AM PAL/skill lab COMMUNITY MEDICINE / Pharmacology		09:45AM – 10:30 Pharmacology (LGIS) /hall 1&2		10:30AM – 11:15AM Pharmacology (CBL) hall 3,4&5,6		11:15AM – 11:45AM BREA		11:45AM – 12:30PM Surgery (LGIS) /hall 4&5		12:30PM – 01:15PM Pathology (CBL) Hall 3,4& 5,patho lab		01:15PM – 02:00PM Pharmacology (SGD) Hall 3,4&5,6
IUGRC Session/ P-Drug & Prescription Writing		Corticosteroids (Mechanism Of Action & Adverse Effects)		Corticosteroids (Clinical Pharmacology)				Neuroendocrine Disorders		Pineal Gland Pathologies		Glucocorticoids Antagonist		
All Demonstrators C Med Dept		Dr Uzma, Dr Hasseba	Dr Zunera	Dr. Attiya	Dr. Zaheer Dr. Zoefeshan	Dr. Arsheen Dr Rubina			Dr. Rahatul Hassan BBH	Dr. Nazan Hassan BBH	Dr Fatima Rizvi, Dr Nida	Dr Abid Dr Lahraib	Dr. Uzma Dr. Zoefeshan	Dr. Haseeba Dr Rubina

Tentative Time Table 4thYEAR MBBS-Endocrinology Module 2023

(4thWEEK)

DATE / DAY		8:00 AM – 9:00 AM		09:00am – 10:00am		10:30am – 12:00pm		12:00pm - 02:00pm					
Monday 19.6.23	Pathology (SGD)		Community Medicine (LGIS)		BREAK 10:00AM – 10:30AM	CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.							
	Disorders of Adrenal medulla & MEN Syndrome		Health system I										
	Hall 1& 2	Hall 3&hall 6	Even/Hall 2	Odd/Hall 1									
	Dr amina noor Dr sara raffi	Dr mahreen, Dr Fatima rizvi	Dr Imran younis	Dr. Gul Mehar									
Tuesday 20.6.23	Family Medicine (LGIS)		Community Medicine (LGIS)										
	Care concepts of FM in NCDs (diabetes, Obesity)		Health system II										
	CPC Hall. Combined Class		Even/Hall 2	Odd/ Hall 1									
	Dr Saadia HOD(family medicine dept.)		Dr Imran younis	Dr Asif									
Wednesday 21.6.23	SDL (Revision of Important topics)												
Thursday 22.6.23	Written exam												
Friday& Saturday 23&24.6.23	Viva voce												

NOTE; Venue for CBL & SGDs is subject to availably of lecture halls. Sometimes due to over lapping of activities, change of venue will be notified.

Community Oriented Clerkship Module (annex I)

COCM

Theme (AIM):

The primary purpose of this module is to educate students in those areas of the subject of CM&PH which are learnt better by onsite presence of the students at certain sites, processes, agencies which have public health relevance and in general community setting. Moreover some, areas of the subject which demands close interactive teachings in small group like HHS data analysis & report writing skills, contraceptive use skills, vaccination skills, etc are also covered during this rotation. All opportunities available within and outside the institution within affordable logistics, time, are focused for this purpose. A short time of this batch rotation is dedicated for health education communication practices as Health awareness work and other social work.

LEARNING OUTCOMES (LOS):

At the end of this learning module students are expected to achieve following Public health Competencies as will be able to:

1. Undertake a population-based health survey (HHS)
2. Appreciate working of First level Care Facility (Public Sector)
3. Perform Community Immunization / EPI vaccinations.
4. Develop Hospital waste management plans.
5. Develop Community based health awareness message.
6. Communicate for Health awareness in community settings.
7. Commemorate International public health days.
8. Develop Hospital administration Plans.
9. Undertake Preventive healthcare inquiries and NCDs Risk Factors Surveillance
10. Counsel for the contraceptive devices to the community

MODULE OUTLINE:

- A batch comprising 20-22 students is posted in the department of CM & PH for a period of 2weeks (Monday to Thursday-04 hrs. /day & for 32hrs in total). This schedule is run over the whole academic year, till all students of 4th year MBBS class passes through this rotation.
- Batch formation and schedules of rotation for whole class as notified by the DME / Student's section will be followed accordingly.
- At commencement of the academic year overall batch learning module coordinator, nomination of batch in-charges, senior faculty in charges and calendar schedule of batch rotation for all batches over the whole academic year will be notified by the Department of CM & PH.

Domains of learning: learning will occur in all the three domains C, A & P

SOPS OF LEARNING & ASSESSMENTS:

- Active participation will be graded by the batch in charge (under a check list) during the activity / session and grades/marks will be entered in the practical manual as out of 05 (Max marks 05) by the batch in charge. 05 Max Marks are reserved for CHC (HMDTD and Health awareness work).
- Assessment will be done by OSPE / MCQs Exam / Viva voce at the end of each module and credit will be objectively recorded for the purpose of internal assessment. (Max mark 10)
- General assessment of the subject learning will be through MCQs, SEQs & OSPE on the relevant subjects in the relevant end of modules, block exams and Send up Exams.
- Students are required to report / write the relevant work in Practical Journal, House Hold Survey Report Book and log all the clerkship activities in the Logbook on daily basis.

Day	Activity -I 10.30 – 11.00	Activity – II 11.00- 11.30am	Activity III 11.30- 01.00pm	Act-V 01.00 – 2.00pm	Sites of teaching-learning	Assessment	Session outcome (level of learning)
	Session topic	Session topic	Session topic	Session topic			
1 st day	instructing / demonstration on Practical Manual based Assignments	Visit to CHC • SGIS on Health days commemoration work, Display material, PPT.	• SGIS on HMDTD practicum. Topic finalization, CHC- Message draft outlines finalization.	<ul style="list-style-type: none"> PPT based Demo on How to conduct & report HHS. Guidelines on PHI work to be done during clinical rotations / ward duties 	<ul style="list-style-type: none"> Demonstration on n / lec Hall 3 CHC - Dept. CM NTB RMU. 	<ul style="list-style-type: none"> 1-2 OSPE in end of clerkship exam (credit will part of IA) Assessment of HHS -Report (Max marks:5 part practical /viva exam 4th Prof MBBS) 	<ul style="list-style-type: none"> Construct a health message. (C6) Prepare Health days commemoration stuff, Display material, PPT, (P) Undertake a health survey. (HHS) (C3)

2 nd day	Follow up session on. - HM-DTD work - HHS work - health days commemoration work	SGIS/ Briefing / PPT based guidelines on field visit of the day (EPI services center HFH)	FV to the EPI center HFH	Health awareness work (HAW)	<ul style="list-style-type: none"> Demo Room, EPI Center HFH OPD, hospital shelters sites for health awareness work (HAW) 	<ul style="list-style-type: none"> 1-2 OSPE in end of clerkship exam (credit will part of IA) Grade of performance in EPI visit reporting. Credit of HAW 	<ul style="list-style-type: none"> Explain cold chain component at EPI center Vaccinate (EPI) vaccines to the clients. Comprehend EPI system
3 rd day	Follow up session on HM- DTD work & HHS	SGIS / Briefing / PPT based guidelines on FV to MCH & FP Services Center HFH	FV to the MCH services & FP center HFH	Health awareness work (HAW)	<ul style="list-style-type: none"> FP Center HFH OPD, hospital shelters sites for HAW 	<ul style="list-style-type: none"> 1-2 OSPE in end of clerkship exam (credit will part of IA) Grade of performance in EPI visit reporting. Credit of HAW 	<ul style="list-style-type: none"> Identify CP devices available at MHC FP center Counsel clients for use of a contraception method Place CP devices to client (P)

4 th day	Follow up session on HM- DTD work & HHS	Briefing / guidelines on FV Hospital waste disposal system in hospitals	• FV to the hospital waste disposal system & relevant sites / Incinerator	Health awareness work (HAW)	• FP Center HFH OPD, hospital shelters sites for HAW	• End of module OSPE • Grade of performance in visits to sites	<ul style="list-style-type: none"> • Explain hospital waste disposal system • Develop a hospital waste management plan • Explains various domains of hospital management (C2)
5 th day week 2)	SGIS / PPT based briefing on Hospital management & administration	Visit to Hospital management & administration (HFH) office		Health awareness work (HAW)	HHF	• End of module OSPE • Grade of performance in visits to sites	
6 th day	SGIS / PPT based briefing on visit to First level of health care facility (FLCF) BHU/RHC	Field visit to RHC Khayaban Sir-Syed (RHC) or BHU		<ul style="list-style-type: none"> • Demo room / lec Hall 3 NTB / CPC-Hall. • RHC / BHU 	Health awareness work (HAW at site visited	• End of module OSPE • Report credit in PJ	<ul style="list-style-type: none"> • Explain working of FLCF • Appreciate PHC elements at FLCF. (C2)
7 th day	Health days commemoration (walk/ seminar/ presentation/ CHC-message dissemination work (10.30 – 12.00pm)		12.00 – 2.00pm <ul style="list-style-type: none"> • Completion & assessment of relevant Practical Journal work, • HHS-report book, • Logbook etc. • Feedback discussion on PHI 			<ul style="list-style-type: none"> • Communication skills • Comprehend frequency Preventable RFs of NCDs in the real population (RF surveillance) • Undertake a preventive Healthcare inquiry 	

CLINICAL TRAINING ROTATIONS 4TH YEAR MBBS CLASS (SESSION 2019-2020)

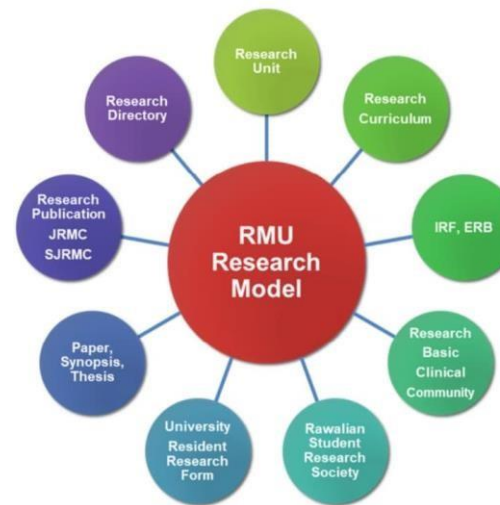
STARTING w.e.f 06-03-2023 ENDING 03-12-2023.

Date	Medicine /Neurology DHQ	OBS/GYN HFH I & II	OBS/GYN BBH & DHQ	C.MED	E.N.T. H.F.H.	E.N.T. B.B.H	E.N.T. D.H.Q	Medicine DHQ	EYE H.F.H	EYE B.B.H.	EYE DHQ	PEADS H.F.H	PEADS B.B.H.	CARDIO	PATH	NEUROS URGER Y
06-03-2023 To 19-03-2023	A	B1, HFH-1 B2, HFH-2	C1, BBH C2, DHQ	D	E	F	G	H	I	J	K	L	M	N	O	P
20-03-2023 To 02-04-2023	B	C1, HFH-1 C2, HFH-2	D1, BBH D2, DHQ	E	F	G	H	I	J	K	L	N		O	P	A
03-04-2023 To 16-04-2023	C	D1, HFH-1 D2, HFH-2	E1, BBH E2, DHQ	F	G	H	I	J	K	L	M		O	P	A	B
17-04-2023 To 07-05-2023 Spring V.	D	E1, HFH-1 E2, HFH-2	F1, BBH F2, DHQ	G	H	I	J	K	L	M	N	P		A	B	C
08-05-2023 To 28-05-2023 Sport W.	E	F1, HFH-1 F2, HFH-2	G1, BBH G2, DHQ	H	I	J	K	L	M	N	O		A	B	C	D
29-05-2023 To 11-06-2023	F	G1, HFH-1 G2, HFH-2	H1, BBH H2, DHQ	I	J	K	L	M	N	O	P	B		C	D	E
12-06-2023 To 31-07-2023 Summer V.	G	H1, HFH-1 H2, HFH-2	I1, BBH I2, DHQ	J	K	L	M	N	O	P	A		C	D	E	F
01-08-2023 To 13-08-2023	H	I1, HFH-1 I2, HFH-2	J1, BBH J2, DHQ	K	L	M	N	O	P	A	B	D		E	F	G

14-08-2023 To 27-08-2023	I	J1, HFH-1 J2, HFH-2	K1, BBH K2, DHQ	L	M	N	O	P	A	B	C		E	F	G	H
28-08-2023 To 10-09-2023	J	K1, HFH-1 K2, HFH-2	L1, BBH L2, DHQ	M	N	O	P	A	B	C	D	F		G	H	I
11-09-2023 To 24-09-2023	K	L1, HFH-1 L2, HFH-2	M1, BBH M2, DHQ	N	O	P	A	B	C	D	E		G	H	I	J
25-09-2023 To 08-10-2023	L	M1, HFH-1 M2, HFH-2	N1, BBH N2, DHQ	O	P	A	B	C	D	E	F	H		I	G	K
09-10-2023 To 22-10-2023	M	N1, HFH-1 N2, HFH-2	O1, BBH O2, DHQ	P	A	B	C	D	E	F	G		I	J	K	L
23-10-2023 To 05-11-2023	N	O1, HFH-1 O2, HFH-2	P1, BBH P2, DHQ	A	B	C	D	E	F	G	H	J		K	L	M
06-11-2023 To 19-11-2023	O	P1, HFH-1 P2, HFH-2	A1, BBH A2, DHQ	B	C	D	E	F	G	H	I		K	L	M	N
20-11-2023 To 03-12-2023	P	A1, HFH-1 A2, HFH-2	B1, BBH B2, DHQ	C	D	E	F	G	H	I	J	L		M	N	O
Date	Medicine /Neurology DHQ	OBS/GYN HFH I & II	OBS/GYN BBH & DHQ	C.MED	E.N.T. H.F.H.	E.N.T. B.B.H.	E.N.T. D.H.Q	Medicine D.H.Q	EYE H.F.H	EYE B.B.H.	EYE DHQ	PEADS H.F.H	PEADS B.B.H.	CARDIO	PATH	NEUROS URGER Y

12- Research

Cultivating the culture of Research has always been envisioned as one of the main pillars of Rawalpindi Medical University, as a means to develop healthcare professionals capable of contributing to the development of their country and the world. For the purpose thereof, right from the inception of Rawalpindi Medical University, efforts were concentrated to establish a comprehensive framework for research in Rawalpindi Medical University, as a matter of prime importance. With team efforts of specialists in the field of research, framework was made during the first year of the RMU, for the development and promotion of Research activities in RMU, called the Research Model of RMU, giving clear scheme and plan for establishment of required components for not only promoting, facilitating and monitoring the research activities but also to promote entrepreneurship through research for future development of RMU itself.



13- Biomedical Ethics

Ethical choices, both minor and major, confront us every day in the provision of health care for persons with diverse values living in a pluralistic and multicultural society.

Four commonly accepted principles of health care ethics, excerpted from Beauchamp and Childress (2008), include the:

1. Principle of respect for autonomy,
2. Principle of no maleficence, 3. Principle of beneficence, and 4. Principle of justice.

14- Family Medicine

Family Medicine is the primary care medical specialty concerned with provision of comprehensive health care to the individual and the family regardless of sex, age or type of problem. It is the specialty of breadth that integrates the biological, clinical and behavioral sciences. Family physicians can themselves provide care for the majority of conditions encountered in the ambulatory setting and integrate all necessary health care services.

15- Artificial Intelligence

Artificial intelligence in medicine is the use of machine learning models to search medical data and uncover insights to help improve health outcomes and patient experiences. Artificial intelligence (AI) is quickly becoming an integral part of modern healthcare. AI algorithms and other applications powered by AI are being used to support medical professionals in clinical settings and in ongoing research. Currently, the most common roles for AI in medical settings are clinical decision support and imaging analysis.



Rawalpindi Medical University

Reproduction Module

Integrated Clinically Oriented Modular Curriculum

4th Year MBBS 2023



Department of Medical Education



Fourth Year MBBS 2023

Study Guide

Population Medicine and Reproduction Module

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Reproduction Module Team

Module Name : Population medicine and Reproduction Module
Duration of module : 07 Weeks

1.	Vice Chancellor RMU	Prof. Dr. Muhammad Umar		1.	Coordinator Dr. Sadia Khan(HOD OBS/GYN BBH) Dr. Ismat Tanveer (Assistant Professor of OBS/GYN)
2.	Director DME	Prof. Dr. Rai Muhammad Asghar		2.	DME Focal Person Dr. Maryum Batool
3.	Convener Curriculum	Prof. Dr. Naeem Akhter			
4.	Dean Basic Sciences	Prof. Dr. Ayesha Yousaf			
5.	Additional Director DME	Prof. Dr. Ifra Saeed			
6.	Chairperson Obs/Gynae	Prof Dr. Lubna Ejaz Khagoon		DME Implementation Team	
7.	Chairperson Community Medicine	Prof. Dr. Arshad Sabir			
8.	Chairperson Pharmacology	Dr. Asma khan			
9.	Chairperson Pathology	Prof. Dr. Mobina Dodhi			
10.	Focal Person Obs/Gynae	Dr. Ayesha Zulfiqar		1.	Director DME Prof. Dr. Rai Muhammad Asghar
11.	Focal Person Community medicine	Dr. Gul Meher		2.	Add. Director DME Dr Asma Khan
12.	Focal Person Pharmacology	Dr. Haseeba Talat		3.	Assistant Director DME Dr. Omaima Asif
13.	Focal Person Pathology	Dr. Ayesha		4.	Module planner & Implementation Coordinator Dr. Omaima Asif
				5.	Editor Dr. Omaima Asif

Prepared by

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Assistant Professor OBS/GYN, BBH
Rawalpindi Medical University, Rawalpindi

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HOD OBS/GYN Department, BBH
Rawalpindi Medical University, Rawalpindi

RMU Motto



University Motto, Vision, Values & Goals

Mission Statement

To impart evidence-based research-oriented health professional education in order to provide best possible patient care and inculcate the values of mutual respect, ethical practice of healthcare and social accountability.

Vision and Values

Highly recognized and accredited centre of excellence in Medical Education, using evidence-based training techniques for development of highly competent health professionals, who are lifelong experiential learner and are socially accountable.

Goals of the Undergraduate Integrated Modular Curriculum

The Undergraduate Integrated Learning Program is geared to provide you with quality medical education in an environment designed to:

- Provide thorough grounding in the basic theoretical concepts underpinning the practice of medicine.
 - Develop and polish the skills required for providing medical services at all levels of the Health care delivery system.
 - Help you attain and maintain the highest possible levels of ethical and professional conduct in your future life.
 - Kindle a spirit of inquiry and acquisition of knowledge to help you attain personal and professional growth & excellence.
-

Reproduction Module Outcomes

Introduction: Reproduction module provides integration of core concepts that underlie the foundation of basic sciences and their use in clinical medicine.This will eventually lead to develop critical thinking for integration and application of basic knowledge for clinical application.

Rationale: The Reproduction module is designed to impart basic knowledge about Obs/Gynea, Pathology, Pharmacology, and Community Medicine. This knowledge will serve as a base onwhich the student will construct further knowledge about the etiology, pathogenesis and prevention of diseases; the principles of their therapeutics and management.

Module Outcomes

Each student will be able to:

Knowledge

Acquire knowledge about the basic terminologies used in Obs/Gynae, Pathology, Pharmacology, and Community Medicine as well as the concepts of diseases in the community.
Appreciate concepts & importance of

- Research
- Biomedical ethics
- Family medicine
- Professionalism, Communication Skills

Skills

Interpret and analyze various practicals of basic Sciences and relevant skills of clinical sciences.

Attitude

Demonstrate a professional attitude, team-building spirit, and good communication skills

This module will run for 7 weeks duration. The content will be covered throughthe introduction of topics. Instructional strategies are given int the timetable and learning objectives aregiven in the study guides. Study guides will be uploaded on the university website. Good luck!

Terms & Abbreviations

Contents

- Domains of Learning
- Teaching and Learning Methodologies/Strategies
 - Large Group Interactive Session (LGIS)
 - Small Group Discussion (SGD)
 - Self-Directed Learning (SDL)
 - Clinical / practicals

Tables & Figures

- Table1. Domains of learning according to Blooms Taxonomy
- Figure 1. Prof Umar's Model of Integrated Lecture
- Table 2. Standardization of teaching content in Small Group Discussions
- Table 3. Steps of taking Small Group Discussions

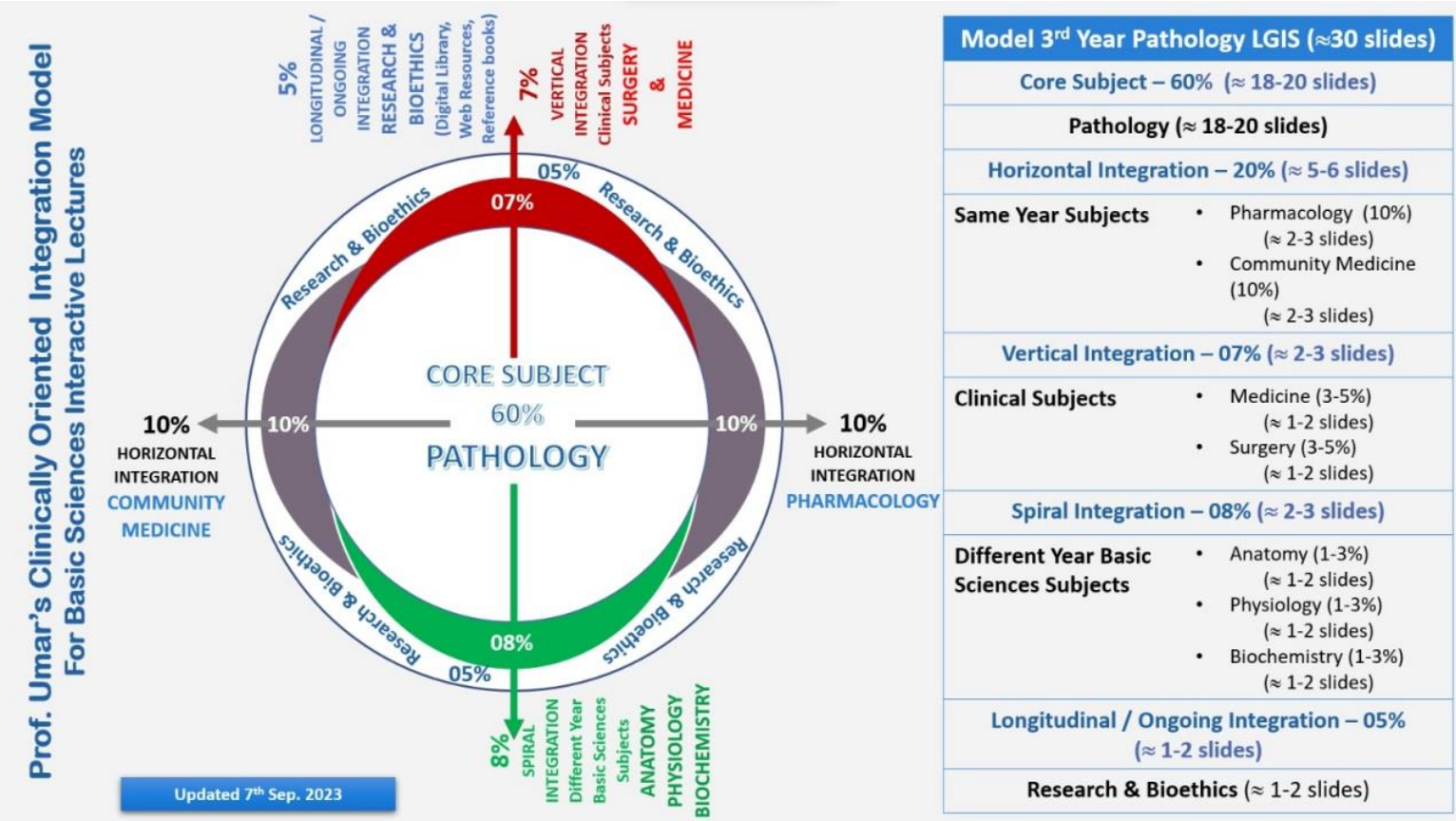
Domains of learning according to Blooms Taxonomy

Sr. #	Abbreviation	Domains of learning
1.	C	Cognitive Domain: knowledge and mental skills.
	C1	Remembering
	C2	Understanding
	C3	Applying
	C4	Analyzing
	C5	Evaluating
	C6	Creating
2.	P	Psychomotor Domain: motor skills.
	P1	Imitation
	P2	Manipulation
	P3	Precision
	P4	Articulation
	P5	Naturalization
3.	A	Affective Domain: feelings, values, dispositions, attitudes, etc
	A1	Receive
	A2	Respond
	A3	Value
	A4	Organize
	A5	Internalize

Teaching and Learning Methodologies / Strategies

Large Group Interactive Session (LGIS)

The large group interactive session is structured format of Prof Umar Model of Integrated lecture. It will be followed for delivery of all LGIS. Lecturer will introduce a topic or common clinical condition and explains the underlying phenomena through questions, pictures, videos of patients, interviews and exercises, etc. Students are actively involved in the learning process.



1.

Small Group Discussion (SGD)

This format helps students to clarify concepts acquire skills and attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics or power point presentations. Students exchange opinions and apply knowledge gained from lectures, SGDs and self study. The facilitator role is to ask probing questions, summarize and helps to clarify the concepts.

Table 2.

Standardization of teaching content in Small Group Discussions

S.No	Topics	Approximate %
1	Title Of SGD	
2	Learning Objectives from Study Guides	
3	Horizontal Integration	5%+5% = 10%
4	Core Concepts of the topic	70%
5	Vertical Integration	10%
6	Related Advance Research points	3%
7	Biomedical Ethical points	2%
8	Spiral integration	5%

Table 3. Steps of taking Small Group Discussions

Step 1	Sharing of Learning objectives by using students Study guides	First 5 minutes
Step 2	Asking students pre-planned questions from previous teaching session to develop co-relation (these questions will be standardized)	5minutes
Step 3	Students divided into groups of three and allocation of learning objectives	5minutes
Step 4	ACTIVITY: Students will discuss the learning objectives among themselves	15 minutes
Step 5	Each group of students will present its learning objectives	20 min
Step 6	Discussion of learning content in the main group	30min
Step 7	Clarification of concept by the facilitator by asking structured questions from learning content	15 min
Step 8	Questions on core concepts	
Step 9	Questions on horizontal integration	
Step 10	Questions on vertical integration	
Step 11	Questions on related research article	
Step 12	Questions on related ethics content	
Step 13	Students Assessment on online MS teams (5 MCQs)	5 min
Step 14	Summarization of main points by the facilitator	5 min
Step 15	Students feedback on the SGD and entry into log book	5 min
Step 16	Ending remarks	

Self Directed Learning (SDL)

- Self- directed learning is a process where students take primary charge of planning, continuing and evaluating their learning experiences.
 - Time Home assignment
 - Learning objectives will be defined
 - Learning resources will be given to students = Text book (page no), web site
 - Assessment: Will be online on LMS every Tuesday during the reproduction module.
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Learning Objectives, Teaching Strategies & Assessments

Contents

- Introduction to RMU and Disciplines
 - Medical Education and Integrated Disciplines
 - Horizontally Integrated Basic Sciences (Anatomy, Physiology, Pharmacology, Pathology, Community Medicine)

 - Large Group Interactive Session:
 - Obs/Gynae (LGIS)
 - Community Medicine (LGIS)
 - Pathology (LGIS)
 - Pharmacology (LGIS)
 - Surgery (LGIS)
 - Medicine (LGIS)
 - Pediatrics (LGIS)
 - Small Group Discussions
 - Obs/Gynae (SGD)
 - Pharmacology (SGD)
 - Pathology (SGD)
 - Community Medicine (SGD)
-
- Self Directed Topic, Learning Objectives & References
 - Obs/Gynae (SDL)
 - Pharmacology (SDL)
 - Pathology (SDL)
 - Community Medicine (SDL)
 - Rotation of Wards, operation theatres

Learning Objectives Of OBS/GYNAE (LGIS)

Topic	Learning objectives At the end of the lecture the student should be able to	Learning domain	Teaching strategy	Assessment tool
Obs/Gynae				
Basic terminologies in obstetrics Basic antenatal care	Enlist the aims of antenatal care. •discuss the importance of early booking and regular anc. •discuss important points in obstetric history and examination. •enlist the booking investigations. •explain the method of calculating edd and gestational age. •elaborate the recommended schedule of antenatal visits. •categorize the obstetric patient into high risk and low risk groups. •define term, preterm, post term, post-dates, lbw, vlbw, lie, presentation, position, attitude and engagment of fetus.	C1 C2 C2 C1 C2 C2 C3 C1	LGIS	MCQS SAQ
Minor pregnancy disorders Nutrition in pregnancy	• enlist the common minor problems of pregnancy . • discuss the physiological basis of these disorders • describe their management options. • discuss the importance of healthy diet and lifestyle in pregnancy. •describe dietary and caloric requirements during pregnancy. Calculate the recommended dose of iron in pregnancy.	C1 C2 C2 C2 C2 C3	LGIS	MCQS SAQ
Prenatal diagnosis	Define prenatal diagnoses. • enlist the conditions diagnosed with prenatal tests. • identify the high risk women for prenatal diagnostic testing. •name the non invasive and invasive tests. • elaborate the timing, method, complications and diagnostic accuracy of each test. • explain the risk prediction method for down's syndrome.	C1 C1 C1 C1 C2 C2	LGIS	MCQS SAQ
Early pregnancy complications (miscarriages, ectopic preganncy)	•define miscarriage and its types. •elaborate the risk factors. explain the clinical features of all types of miscarriage. • discuss key management principles of different types of miscarriages including counseling for future pregnancies.	C1 C2 C2	LGIS	MCQS SAQ
	•define ectopic pregnancy and its common sites.	C1		

	<ul style="list-style-type: none"> •enumerate it's risk factors. •discuss the clinical features of ectopic pregnancy. • enlist the diagnostic investigations for it. •describe the different management options for ectopic pregnancy and its follow up. 	C1 C2 C1 C3		
Induced and septic abortions	Define induced septic abortion. <ul style="list-style-type: none"> •describe their clinical presentations and investigations required. •enumerate the complications of induced septic abortion. •discuss the management plan and follow up. 	C1 C2 C1 C2	LGIS	MCQS SAQ
Diagnosis of labour	Define labour and its different stages. <ul style="list-style-type: none"> • discuss the maternal and fetal anatomy relevant to labor and delivery. 	C1 C2	LGIS	MCQS SAQ
First stage of labour and management	<ul style="list-style-type: none"> •identify the signs of onset of labour. • describe the normal progress of labor in relation to partogram. • explain the methods of fetal monitoring during labor and their normal values. •describe the significance of power, passage and passengers. •discuss importance of adequate hydration and diet during labour. 	C1 C2 C1 C2 C2		
Abnormalities of 1st stage of labour	Describe the abnormalities of 1st stage of labour . <ul style="list-style-type: none"> •discuss the contribution of power, passage and passenger in progress of labour. • identify the abnormal progress of labor on partogram. 	C2 C2 C1	LGIS	MCQS SAQ
Normal Ctg	Scenario based discussion on fetal monitoring during labour after which students will be able to <ul style="list-style-type: none"> •enlist different methods of fetal assessment during labour. •identify the 04 basic fhr parameters to be interpreted on ctg trace. •differentiate between normal and abnormal ctg patterns. •discuss conditions in which continuous electronic fhr monitoring is required. 	C1 C2 C2 C2	LGIS	MCQS SAQ

Second stage of labour	define the second stage of labour and its normal duration. C1	C1	LGIS	MCQS
Normal labour	<ul style="list-style-type: none"> •discuss the management of second stage of labour. C2 • discuss role of power passage and passenger in prolong second stage of labour. C2 •describe the mechanism of normal labour. C2 	C2 C2 C2		SAQ
Episiotomy	<ul style="list-style-type: none"> •define episiotomy. • enlist its different types. 	C1 C1	LGIS	MCQS
Operative vaginal delivery	<ul style="list-style-type: none"> •explain anatomical structures involved in episiotomy. •identify indications of episiotomy in correlation with the patient's condition. • discuss complications of episiotomy. • define operative vaginal delivery. • discuss the urgency of operative vaginal deliveries. •enumerate its indications. • discuss prerequisites of operative vaginal delivery. •discuss methods for application of forceps and vacuum. • enlist the complications of operative vaginal delivery. 	C2 C3 C2 C1 C2 C1 C2 C2 C1		SAQ
Abdominal delivery	<ul style="list-style-type: none"> define abdominal delivery. • discuss briefly the anatomy of anterior abdominal wall. • discuss the indications of c-section. • categorize the caesarean section according to rcog. • explain the steps of lscs. •describe the steps of cesarean section. • discuss the complications associated with lscs. 	C1 C2 C2 C3 C2 C2 C2	LGIS	MCQS SAQ
Third stage of labour and its complications (retained placenta, uterine inversion)	<ul style="list-style-type: none"> Define third stage of labour •discuss management of third stage of labour. •define post partum hemorrhage. *primary post-partum haemorrhage. *secondary post-partum haemorrhage. •discuss the risk factors for post-partum haemorrhage. 	C1 C2 C1 C1 C1 C2	LGIS	MCQS SAQ
Post partum hemorrhage	<ul style="list-style-type: none"> •describe the signs, symptoms and diagnosis of primary pph . •discuss the investigations and management of primary post-partum haemorrhage. •describe the signs, symptoms and diagnosis of secondary post-partum haemorrhage. •discuss investigations and management of secondary postpartum haemorrhage. 	C2 C2 C2 C2	LGIS	MCQS SAQ

Puerperium and its complications	<ul style="list-style-type: none"> •define puerperium. • explain the normal physiological changes of normal puerperium. •discuss the postnatal care during puerperium. •identify the common disorders of puerperium and their management. 	C1 C2 C2 C1	LGIS	MCQS SAQ
Contraception	<ul style="list-style-type: none"> define contraception. •discuss different methods of contraception and their mechanism of action. •enlist side effects and failure rate of each contraception. •explain emergency contraception. 	C1 C2 C1 C2	LGIS	MCQS SAQ
Multiple pregnancy	<ul style="list-style-type: none"> •define multiple pregnancy. • discuss the types of twin gestation according to chorionicity and zygosity. • interpret the ultrasound findings of multiple pregnancy in first trimester. •discuss the antenatal care in twin pregnancy. •discuss the fetomaternal complications associated with multiple pregnancy. •plan the mode of delivery according to presentation of first twin. . •describe the mechanism of delivery of twins. 	C1 C2 C3 C2 C2 C3/C4 C2	LGIS	MCQS SAQ
Antepartum hemorrhage	<ul style="list-style-type: none"> •define antepartum haemorrhage •enlist causes of aph. •differentiate clinically between placenta previa and placental abruption. • elaborate the emergency approach towards the patient with massive haemorrhage. • discuss management plan for placenta previa. • discuss the management plan for placental abruption. 	C1 C1 C3 C2 C3 C3	LGIS	MCQS SAQ

Perineal infections	<ul style="list-style-type: none"> • elaborate the infections causing congenital abnormalities. • explain the congenital infections causing preterm birth and pregnancy loss. • identify infections acquired around time of birth causing serious neonatal consequences. • discuss the perinatal infections causing long term disease. 	C1 C2 C1 C2	LGIS	MCQS SAQ
Preterm labor PPROM	<ul style="list-style-type: none"> •define preterm labour. •enlist its causes. • plan the management of patient with preterm labour. •discuss fetal implications of preterm birth. • define pprom. •enlist its causes. • plan the management of patient with pprom. •discuss fetomaternal complications of pprom. 	C1 C1 C3 C2 C1 C1 C3 C2	LGIS	MCQS SAQ
Prolonged pregnancy/Induction of labour	<ul style="list-style-type: none"> • define prolong pregnancy. • correlate fetomaternal risks associated with prolong pregnancy. •enlist indications and contraindications for iol. • describe modified bishop scoring system. • explain methods of iol. •discuss complications of iol. 	C1 C2 C1 C2 C2 C2	LGIS	MCQS SAQ
Hypertension in pregnancy	<p>Classify hypertensive disorders of pregnancy.</p> <p>Identify fetomaternal risks associated with hypertensive disorders of pregnancy. Explain the pathophysiology of hypertensive disorders of pregnancy.</p> <p>Discuss the clinical features of pre eclampsia and eclampsia. Enlist relevant investigations.</p> <p>Elaborate the principles of management of hypertensive disorders of pregnancy.</p>	C2 C1 C2 C2 C1 C3	LGIS	MCQS SAQ
IUGR&oligohydramnios	<p>Define fetal growth restriction.</p> <ul style="list-style-type: none"> •discuss the aetiology. • explain the pathophysiology of iugr. •discuss the antenatal surveillance of the fgr fetus. •outline the management plan regarding timing and mode of delivery. •elaborate the prognosis of fetus in iugr. 	C1 C2 C2 C2 C3 C1	LGIS	MCQS SAQ

Rh Incompatibility	Define rh incompatibility. •discuss the etiology and pathophysiology of rhesus disease. •enlist the potential sensitizing events for rhesus disease. •explain the management of sensitizing events in rhesus negative pregnant woman. •discuss prevention of rhesus isoimmunisation. •enlist the fetal complications associated with rh incompatibility. • elaborate the management of rhesus disease in a sensitized woman.	C1 C2 C1 C2 C2 C1 C3	LGIS	MCQS SAQ
Medical disorders in pregnancy	scenario based discussion on diagnosis and management of : •hypertension in pregnancy •diabetes in pregnancy • anemia and thrombocytopenia in pregnancy • cardiac disease in pregnancy.	C3/C4	LGIS	MCQS SAQ
Revison of stages of labour and management			LGIS	

Intra-uterine Death	<ul style="list-style-type: none"> • define intrauterine fetal death. • enumerate the causes of iufd. • enlist the investigations to rule out causes of iufd. • discuss the important points of counselling of parents in breaking the bad news. • discuss the fetomaternal complications associated with iufd. • elaborate management of patient with iufd. 	C1 C1 C1 C2 C2 C3	LGIS	MCQS SAQ
Management of GTD	<ul style="list-style-type: none"> • define gestational trophoblastic disease. • classify the different types of gtd. • enumerate the clinical features of gtd. • enlist important investigation to be done in gtd. • discuss the management of gtd, its followup and contraceptive advice. 	C1 C2 C1 C1 C3	LGIS	MCQS SAQ
Physiology of Menstrual Cycle	<p>Describe features of normal menstrual cycle.</p> <ul style="list-style-type: none"> • elaborate the ovarian and endometrial changes which occur during normal menstrual cycle. • discuss the role of hpo axis in controlling the menstrual cycle. 	C1 C2 C2	LGIS	MCQS SAQ
Management of STDs	Scenario based discussion on clinical features, diagnostic investigations, contact tracing and management of different std's. (chlamydia, trichomoniasis, gonorrhoea, hiv, syphilis, hepatitis b&c.	C3/C4	LGIS	MCQS SAQ
Management of benign & malignant disease of vulva & vagina	<p>Name the common benign conditions of vulva and vagina. Identify their etiological factors.</p> <p>Describe their clinical presentation. Enlist their diagnostic investigations.</p> <p>Discuss the management options for each condition. Name the malignant conditions of vulva and vagina. Describe their clinical presentation.</p> <p>Enlist their diagnostic investigations.</p> <p>Discuss the management options for each condition.</p>	C1 C1 C2 C1 C3 C1 C2 C1 C3	LGIS	MCQS SAQ
Management of premalignant & malignant disease of cervix	<ul style="list-style-type: none"> • define premalignant diseases of cervix. • discuss the role of hpv testing in cervical screening programme. • enlist the investigations for cervical screening of mass population. • enumerate types of cin and their management options. • discuss the pathogenesis of cervical ca. • elaborate the figo staging of cervical cancer. • discuss the management options according to the stage of disease. 	C1 C2 C1 C1 C2 C2 C3	LGIS	MCQS SAQ
Management of benign & malignant disease of uterus.	<ul style="list-style-type: none"> • enlist the common benign conditions of uterus according to their tissue of origin. • discuss the clinical features of benign uterine conditions. • describe the tests used to evaluate the uterine and endometrial pathology • explain the available treatment options for uterine fibroids and the rationale for selection. 	C1 C2 C2 C3	LGIS	MCQS SAQ

	<p>Classify malignant diseases of uterus.</p> <ul style="list-style-type: none">• identify their etiology, risk and protective factors .•discuss clinical presentation of malignant disease of uterus.•describe the investigations needed for diagnosis and staging of uterine cancer.•discuss figo staging of endometrial cancer.•explain management, follow up amd five year survival rate of endometrial cancer.	C2 C1 C2 C2 C2 C3		
Management of benign and malignant ovarian tumors	<ul style="list-style-type: none">• enlist the types of malignant ovarian tumors.• enumerate their risk factors.•describe clinical features of the disease. <p>explain the diagnostic criteria investigations and tumor markers of malignant ovarian tumor.</p> <ul style="list-style-type: none">•discuss the figo staging of ovarian carcinoma.• discuss management, follow up and 5 year survival of ovarian ca .	C1 C1 C2 C2 C2 C3	LGIS	MCQS SAQ
AUB & PMB				

Community Medicine (LGIS)

S.No.	Topic	Contents Outlines (Major Topics & Sub- Topics)	<ul style="list-style-type: none"> Learning Objectives (With Level Of Cognitive Learning) After The Session Students Will Be Able To: 	Level of cognition	Assessment Tools
1.	Reproductive Health and domiciliary services	Preventive medicine in obstetrics-I Maternal and child health care(MCH) Maternity cycle MCH problems Delivering MCH services Recent trends in MCH care	<ul style="list-style-type: none"> Define and comprehend the rationale of different components of maternal and child health including Reproductive health & its components Safe motherhood & its components Maternal mortality rate, causes & prevention infant mortality rate, causes & Prevention MCH centre Child care- IMCI Infer the logic behind application of different preventive measures in various phases of life to improve the maternal health Appreciate the relationship between the maternal health status and the outcome of pregnancy Determine the factors that contribute to increase maternal mortality rate (MMR) Develop interventions to control MMR To understand the selection of different indicators for multi-dimensional concept of health related to MCH services To acquire knowledge on different indicators which can be used for maternal and child health care and service. 	C1 C2 C2 C2 C3 C1 C2 C3 C2 C3 C2 C2	MCQS SEQS
2.	Preventive obstetrics	Preventive medicine in obstetrics-II Preventive services for mothers Indicators in MCH care	<ul style="list-style-type: none"> Understand the availability of preventive services for mother during antenatal period appraise the mortality indicators related to MCH care 	C1 C2	MCQS SEQS
3.	Preventive obstetrics in Post natal period	Preventive medicine in obstetrics-III domiciliary care Institutional care Rooming in Post natal period and related complications	<ul style="list-style-type: none"> Comprehend the concept of care required for the rapid restoration of the mother to optimum health Enlist the preventive strategies required to prevent complications during intra natal & post-natal period. Appreciate the importance of health education for mother/family regarding intra natal & postnatal complication 	C2 C2 C2 C1	MCQs SEQs

			<ul style="list-style-type: none"> Understand the relevance of family planning services provided during postnatal period 		
4.	Preventive medicine in pediatrics	Preventive medicine in pediatrics-I Mortality in infancy and childhood Integrated Management of Childhood Illness (IMCI)	<ul style="list-style-type: none"> Knowledge about concept of infant mortality Determine the factors which predispose to high infant mortality Appreciate the causes of infant mortality in different phases of child bearing and postnatal periods. Classify according to Integrated Management of Childhood Illness Classify degree of Pneumonia and ARI according to IMNCI 	C1 C2 C1 C1 C2	MCQs SEQs
5.	Preventive medicine in pediatrics growth & development	Preventive medicine in pediatrics-II Surveillance of growth & development Preventive measures to control infant and child mortality	<ul style="list-style-type: none"> Able to record Weight the baby and measure the height of children Assess degree of dehydration Prepare home-made ORS interpret growth chart Suggest preventive measures at different levels of prevention and in different scenarios Understand the logic of measures taken to prevent infant and child mortality 	C3 C3 C3 C3 C1 C2	MCQs, SAQs,
6.	Demography and population trends	Definition Linkage of Demography with other disciplines Application of Demography within the health system Sources of population data Measures of Mortality Measures of fertility Population explosion	<ul style="list-style-type: none"> Define demography and population dynamics Discuss linkage of demography with other disciplines Apply demographic concepts in health system. Discuss all major sources of population data with special emphasis on population Census Calculate different rates related to mortality from given data Calculate different rates related to fertility from given data Describe Demographic, economic, social and interdisciplinary implications of population explosion 	C1 C3 C3 C2 C3 C3 C2	MCQS, SEQS AND OSPE AND VIVA VOCE
7		Demographic transition Demographic cycle Malthusian theory Population Momentum Demographic dividend, bonus , trap Growth Rate Population doubling time	<ul style="list-style-type: none"> Discuss theory of demographic transition Describe and interpret stages of demographic cycle with examples and logical reasoning Graphically illustrate the stages of demographic cycle Explain limitations of this model Discuss Malthusian theory of population growth Explain population momentum Describe the effect of population momentum on growth of population 	C2 C2 C2 C2 C2 C3 C3	MCQS, SEQS AND OSPE AND VIVA VOCE
			of population		

			<ul style="list-style-type: none"> Discuss demographic dividend, bonus, trap Calculate growth rate from given data Calculate and interpret population doubling time 	C3 C3 C3	
8.		Population dynamics or change Migration and urbanization Population density Family size Replacement level fertility Life expectancy	<ul style="list-style-type: none"> Discuss concept of demographic equation Calculate population at a particular time from the given data Calculate population in future from given data Discuss push and pull factors associated with migration. Describe various measures of migration. Discuss implications of urbanization Explain types of migration and associated measures Define population density Explain family size and factors associated with it Explain replacement level fertility State what is meant by life expectancy and how it is calculated 	C1 C3 C3 C2 C1 C2 C1 C2 C2 C3 C3	MCQs, SEQs and OSPE and Viva Voce
9.		functions of school health services health related problems of school children implementation strategies of school health services	<ul style="list-style-type: none"> Define School health services Enlist objectives of School Health Services. Explain duties of School Health Team. Enlist various health related problems of School children. Enumerate and explain various functions of School health services. Demonstrate importance of implementation of various aspects of school health services. 	C1 C1 C2 C2 C2 C2	MCQs, SEQs and OSPE
10.		1. definition 2. difference between handicapped, impairment, disability 3. types of disability 4. rehabilitation	<ul style="list-style-type: none"> Define handicapped Define impairment and disability Differentiate between handicapped, impairment and disability with examples Enlist types of disability and causes of disability Define rehabilitation, enlist types of rehabilitation and objectives of rehabilitation .Integrated approach towards handicapped and prevention of disability Social attitude towards handicapped 	C1 C1 C2 C1 C2 C2 C2	MCQ'S SAQ
11.		1. Concept and definitions types	<ul style="list-style-type: none"> Define economics, health economics Explain 	C1 C2	MCQ'S SAQ

		2. Framework of health economics 3. Supply and demand 4. elasticity	<ul style="list-style-type: none"> ○ Macroeconomics ● Microeconomics <ul style="list-style-type: none"> ○ Positive economics ○ Normative Economics ● Describe framework of health economics ● Explain law of demand and law of supply ● Describe elasticity 	C3 C3 C2 C3	
12.		1. Production possibility frontier 2. Different types of Costs 3. Structures of Economic Evaluation	<ul style="list-style-type: none"> ● Describe Production possibility frontier ● Explain Different types of Costs ● Explain ● Cost minimization analysis <ul style="list-style-type: none"> ○ Cost effectiveness analysis ○ Cost utility analysis ● Cost Benefit analysis 	C1 C1 C1 C3 C3	MCQ'S SAQ
13.	Public health on global scale	World Health Organization United Nations International Children's Emergency Fund (UNICEF)	<ul style="list-style-type: none"> ● Describe history, constitution and objectives of WHO ● State WHO regions ● Explain organizational structure of WHO with functions of each ● Describe history, mission and milestones of UNICEF ● 5. Enlist important NGOS of Pakistan 	C1 C1 C1 C1 C1	MCQ'S SAQ
14.		Health aspects of family planning Welfare concept Small family norms Eligible couples Couple protection rate	<ul style="list-style-type: none"> ● To identify the need and requirements for an informed decision-making process on contraceptive choice ● To characterize the principles of reproductive rights and gender issues related to family planning ● identify the scope of family planning ● appreciate health aspects of family planning ● understand the terms of small family norms and eligible couples & target couples ● 6. calculate the couple Protection rate of a given population 	C2 C2 C1 C3 C1 C3	MCQs, SEQs and OSPE
15.		National population policy Unmet need of family planning Classification of Fertility regulating methods Barrier methods Natural contraceptive methods Terminal methods	<ul style="list-style-type: none"> ● Explain national population policy ● understand the concept of unmet need of family planning ● Classify fertility regulating method ● comprehend barrier method ● classify natural methods of fertility control 	C2 C2 C2 C1 C2 C2	MCQs, SEQs and OSPE

			<ul style="list-style-type: none"> • explain sterilization and its complication 		
16.		Advantages of breast feeding Weaning practices Feeding associated problems Baby friendly hospital initiative (BFHI)	<ul style="list-style-type: none"> • Procure knowledge about advantages &disadvantages of types of feeding practices. • Acquire knowledge of the hazards associated with feeding of the child. • Appreciate the logic behind the conditions of concern prevailing in the mother during breast feeding. • Identify, the problems associated with feeding and the measures to rectify. • Educate mothers about the steps of weaning • Educate the mothers about technique of breast feeding and to advice to Tuberculous mother about lactation • Determine the conditions of concern prevailing in the mother during breast feeding • Understand BFHI 	C1 C1 C2 C1 C1 C1 C1	MCQS, SEQS AND OSPE AND VIVA VOCE
17.	Genetics	Preventive and social measures of genetic diseases and genetic counselling	<ul style="list-style-type: none"> • Acquire knowledge about human genetics, genotype, phenotype • Classify genetic diseases • Describe Preventive and social measures of genetic diseases • Define euthenics • Explain importance of Genetic counselling 	C1 C2 C3 C1 C3	MCQS & SEQS

Pharmacology (LGIS)

LGIS				
Topic	Learning Objectives	Learning Domains	Teaching strategy	Assessment tool
Prolactin antagonist	<ul style="list-style-type: none"> Enumerate Prolactin Antagonists Describe Mechanism of Action, Uses as well as adverse effects of Prolactin Antagonists 	C1 C2	LGIS	SEQ MCQ VIVA
Gonadal hormones: I Estrogens	<ul style="list-style-type: none"> Enumerate Estrogen antagonists/SERMs Describe mechanism of action, uses & adverse effects of Estrogen antagonists/SERMs 	C1 C2	LGIS	SEQ MCQ VIVA
Gonadal hormones :II Progestin	<ul style="list-style-type: none"> Describe mechanism of action, uses & adverse effects of Progesterone antagonists 	C2	LGIS	SEQ MCQ VIVA
Gonadal hormones:III Anabolic	<ul style="list-style-type: none"> Enumerate androgen preparations Describe uses & adverse effects of androgen preparations Discuss Pharmacokinetic and Pharmacodynamics of Anti-androgens 	C1 C2 C2	LGIS	SEQ MCQ VIVA
Hormonal contraceptives	<ul style="list-style-type: none"> Classify hormonal Contraceptives Discuss the mechanism of action of hormonal contraceptives Discuss the adverse effects and contraindications 	C1 C2 C2	LGIS	SEQ MCQ VIVA
Oxytocic drugs and Uterine Relaxants	<ul style="list-style-type: none"> Describe actions of oxytocin Describe uses and adverse effects of oxytocin Elaborate clinical uses of prostaglandin Enlist ergot alkaloids, their uses and adverse effects Classify Tocolytics Describe the pharmacodynamics of tocolytic agents Discuss their uses & adverse effects 	C2 C2 C3 C1 C1 C2 C2	LGIS	SEQ MCQ VIVA
Drug used in the treatment of infertility	<ul style="list-style-type: none"> Enlist drugs used for treatment of Infertility Discuss Pharmacokinetics and Pharmacodynamics Discuss adverse effects and interactions 	C1 C2 C2	LGIS	SEQ MCQ VIVA

PATHOLOGY (LGIS)

TOPIC	Contents Outlines (Major Topics & Sub- Topics)	<ul style="list-style-type: none">Describe Etiology and morphology of Acute and Chronic Cervicitis (C2)	Lear ning dom ain	Teach ing strate gy	Assess ment tool
Malignant diseases of cervix.	<ul style="list-style-type: none">Cervical Intraepithelial NeoplasiaCervical Carcinomas	<ul style="list-style-type: none">Interpret morphological diagnosis of Cervical intraepithelial Neoplasia.	C3	LGIS	MCQs, SEQs, OSPE
		<ul style="list-style-type: none">Classify Cervical Carcinomas	C2		Viva
		<ul style="list-style-type: none">Describe Morphological features and prognosis of cervical cancer.	C2		
Benign Diseases of Uterus	Endometrial hyperplasia and epithelial neoplastic lesions	<ul style="list-style-type: none">Enlist causes of endometrial hyperplasia and carcinoma.	C1	LGIS	MCQs, SEQs, OSPE
		Evaluate morphological features of Endometrial Hyperplasia.	C3		Viva
		<ul style="list-style-type: none">Describe classification, genetic pathogenesis and morphology of	C2		

			Malignant			
			Tumors of the			
			Endometrium			
	Benign diseases of ovary	Classification of ovarian Cystic neoplasm and Polycystic ovarian syndrome	<ul style="list-style-type: none"> • Categorize nonneoplastic and functional ovarian cysts • Describe Pathogenesis of polycystic ovarian syndrome • Interpret morphological diagnosis of endomertriotic cyst 	C2 C2 C3	LGIS	MCQ SEQ VIVA
	Malignant diseases of Ovary.	Ovarian tumors	<ul style="list-style-type: none"> • Classify ovarian tumours. • Describe pathogenesis morphological features and prognosis of surface epithelial ovarian tumours • Interpret morphological diagnosis of ovarian tumors • Differentiate between pathogenesis and histopathological features of various Germ cell and sex cord stromal ovarian tumour • Describe Prognosis and staging of ovarian tumours 	C2 C2 C3 C3 C2	LGIS	MCQ SEQ VIVA
	Benign neoplasm of breast	Non neoplastic lesions of breast -	The students should be able to 1)identify the congenital anomalies of breast	C1	LGIS	MCQ SEQ

	congenital anomalies. inflammatory lesion of breast. duct ectasia, fat necrosis and granulomatous mastitis.	2)Classify and describe the inflammatory lesions of breast 3)explain duct ectasia fat necrosis and granulomatous mastitis	C2 C2		VIVA
Benign neoplasm of breast	Benign neoplastic lesions of breast Proliferative epithelial lesions without atypia and Proliferative epithelial lesions with atypia. fibrocystic breast disease breast stromal lesions.	The students should be able to		LGIS	MCQ SEQ VIVA
		1)Compare proliferative lesions with and without atypia	C2		
		2)Describe the morphology and pathophysiology of fibrocystic disease and stromal lesions of breast	C2		
Malignant neoplasm of breast	Malignant lesions of breast Classification of epithelial and stromal malignant lesions <ul style="list-style-type: none"> invasive mammary 	The students Should be able to		LGIS	MCQ SEQ VIVA
		1)Classify the neoplasms of breast 2)explain the histology,grading,staging,lab diagnosis of breast cancer	C2 C2		

	carcinoma (NOS) <ul style="list-style-type: none">• Familial Breast Cancer, with molecular Mechanisms of Carcinogenesis and Tumor Progression				
Testicular tumors	Testicular Tumors	-The students should be able to		LGIS	SEQ/
		1)Classify different testicular tumors	C2		MCQ
		2)explain Clinical Presentation ,Morphological findings ,Staging and Lab Diagnosis of testicular tumors	C2		

SURGERY (LGIS)

LGIS				
Pelvic cellulitis& abscess	Describe brief anatomy of pelvis and its structure 2. Enumerate possible causes of pelvic infusion in both male and female Patients 3. Enlist important clinical , signs and symptoms 4. Discuss the role of different investigation and differential diagnoses 5. Describe management plan for these patients	LGIS	C2/C3	MCQS
Complication of laparotomy (visceral & vascular injury)	Briefly describe anatomy of the abdominal wall and its visceral and vascular Structures 2. Enlist commonly performed elective + emergency laprotomy 3. Enumerate vulnerable vascular and visceral structures at risk of complication During laprotomy 4. Identify signs and symptoms to recognize these injuries 5. Make management plan to deal with these injuries, the role of multiple Specialities and team work in management of these complications.	LGIS	C2/C3	MCQS

PAEDIATRICS (LGIS)

LGIS				
Neonatal resuscitation	<ul style="list-style-type: none"> Identify the babies who will need resuscitation at birth Enlist steps of resuscitation as per algorithm Identify different sizes of face masks, ambu bags, laryngoscope blades and their use by pictures . 	LGIS	C2/C3	MCQS
Breast feeding	<ul style="list-style-type: none"> Enumerate advantages of breast feeding Describe the physiology Know the importance of early initiation of breast feeding Enlist five steps towards good breast feeding 	LGIS	C2/C3	MCQS
LBW / prematurity	Define lbw babies Enlist common causes of lbw babies Enumerate important complications and problems of premature babies Manage prematurity and its complications	LGIS	C2/C3	MCQS
Immunization	<ul style="list-style-type: none"> Know the importance of vaccination in prevention Know the disease covered in immunization schedule Know the extended program of immunization(epi) in pakistan Know the role of immunization in health of a child Know the method of administration and common side effects of vaccines used in epi 	LGIS	C2/C3	MCQS

Neonatal seizures	<ul style="list-style-type: none">• Define neonatal seizures• Enlist common causes of neonatal seizures• Describe clinical types• Plan pertinent investigations, interpret and take appropriate action Manage according to the cause Plan follow up	LGIS	C2/C3	MCQS
IDM	Know the clinical manifestations of IDM Do immediate monitoring of IDM Identify important complications Plan pertinent investigations, interpret and take appropriate action Manage IDM and its complications	LGIS	C2/C3	MCQS
Neonatal jaundice	<ul style="list-style-type: none">• Enlist common causes of unconjugated and Conjugated hyperbilirubinemia at different days Of life• Plan pertinent investigations, interpret and take appropriate action• Know indications of phototherapy and exchange transfusion.• Manage according to the cause• Identify complications and manage	LGIS	C2/C3	MCQS

MEDICINE (LGIS)

Infections in pregnancy (rti's, git, eye/ent, Dermatitis)	<p>At the end of lecture, students will be able to:</p> <p>A) enlist common infections which occur more frequently in pregnancy and risk factors for these infections</p> <p>B) know obstetric complications of infections</p> <p>C) treatment of infections in pregnancy and during breastfeeding</p>	<p>LGIS/PPT/ CASE VIGNETTE</p>	C3/A3
Diabetes in pregnancy	<p>At the end of lecture, students will be able to:</p> <p>A) recall etiology, pathophysiology of gestational diabetes mellitus</p> <p>B) explain risk factors, clinical features and investigations to confirm diagnosis</p> <p>C) construct management plan of each disorder and discuss complications of these conditions for both fetus and mother</p>	<p>LGIS/PPT/ Case vignette</p>	C3/A3
Anaemia in pregnancy	<p>At the end of lecture, students will be able to:</p> <p>A) recall etiology, pathophysiology and common types of anemia in pregnancy</p> <p>B) explain risk factors for anemia, clinical features and investigations to confirm diagnosis</p> <p>C) construct management plan including prevention and discuss complications of anemia for both fetus and mother</p>	<p>LGIS/PPT/ CASE VIGNETTE</p>	C3/A3
Liver disorders & thrombocytopenia in pregnancy	<p>At the end of lecture, students will be able to:</p> <p>A) discuss etiologies and risk factors for common thrombotic disorders in pregnancy</p> <p>B) explain clinical features and investigations to confirm thrombotic disorders in pregnancy</p>	<p>LGIS/PPT/ CASE VIGNETTE</p>	C3/A3
	and post partum period		

	C) discuss appropriate anticoagulation therapy in pregnancy and breastfeeding		
Epilepsy in pregnancy	<p>At the end of lecture, students will be able to:</p> <p>A) explain how does epilepsy effects pregnancy</p> <p>B) know antiepileptics drugs which are safe in pregnancy and breastfeeding</p> <p>C) construct management plan and discuss complications of epilepsy for both fetus and Mother</p>	<p>LGIS/PPT/</p> <p>VIGNETTE</p>	C3/A3
Asthma in pregnancy	<p>At the end of lecture, students will be able to:</p> <p>A) explain the effects of pregnancy on asthma</p> <p>B) explain risk factors, clinical features and investigations to confirm diagnosis</p> <p>C) discuss treatment plan and appropriate medication to control asthma in pregnancy</p>	<p>LGIS/PPT/</p> <p>CASE</p> <p>VIGNETTE</p>	C3/A3
Thrombotic disorders in pregnancy	<p>At the end of lecture, students will be able to:</p> <p>A) explain etiologies and prevalence of thrmbocytopenia in pregnancy</p> <p>B) management of delivery in thrombocytopenia keeping in mind both maternal and neonatal considerations</p> <p>C) brief overview of liver diseases during pregnancy and their management individually</p>	<p>LGIS/PPT/</p>	C3/A3

OBS/GYNAE(SGD)

Scenario based sgd (mechanism of fetal delivery &delivery of placenta)	<ul style="list-style-type: none"> • pictorial demonstration of mechanism of normal labour. •pictorial demonstration of delivery of placenta. • scenario based discussion of management of abnormal labor. 	C3 C3 C3/C4	SGD	OSCE
Malpresentation	<ul style="list-style-type: none"> •define malpresentations and its different types(breech,face,brow,shoulder ,cord presentation) •discuss the antenatal management of breech presentation. •pictorial demonstration of external cephalic version. •outline the management plan including mode of delivery. • enlist the prerequisites for breech vaginal delivery. •discuss the management of breech in labour. 	C1	LGIS/SGD	MCS SAQ OSCE
Covid-19 in pregnancy and immunization	<ul style="list-style-type: none"> • discuss guidelines of covid 19 in pregnancy. • scenario based discussion regarding management of covid-19 in pregnancy according to disease severity. • discuss guidelines of dengue in pregnancy. 	C2 C3/C4 C2	Scenario Based Discussion	MCQ SAQ
Dengue and HIV in pregnancy	<p>scenario based discussion regarding management of dengue in pregnancy.</p> <ul style="list-style-type: none"> • discuss guidelines of HIV in pregnancy. • scenario based discussion regarding management hiv in pregnancy. 	C3/C4 C2 C3/C4	Scenario Based Discussion	MCQS SAQ

Community Medicine(SGD)

S.No.		Content Outlines(Major Topics & Sub Topics)	● Learning Objectives	Level of cognition
1.	Evaluation of Family Planning methods	Intra uterine devices Hormonal contraceptives Postconceptional methods Evaluation of contraceptive methods	<ul style="list-style-type: none"> characterize the following contraceptive methods based on mechanism of action, indicators of effectiveness, side effects, non-contraceptive benefits, eligibility criteria and interventions for certain problems during use: <ul style="list-style-type: none"> Combined oral contraceptives Progestin only pills Injectable contraceptives Hormonal implants Tubal ligation and vasectomy Intrauterine contraceptive devices Emergency contraception New contraceptive technology Identify the methods for family planning evaluation 	C1 C1 C1 C1 C1 C1 C1 C2 C1
2.	Demographic transitions	Population pyramids Dependency ratio Age-sex composition	<ul style="list-style-type: none"> Explain population pyramid Read and interpret a population pyramid Identify and interpret population pyramids in different stages of growth Identify and interpret different types of population pyramids with respect to shape Explain any asymmetry in shape Identify baby boom in population pyramid State importance of population pyramids Calculate and interpret dependency ratio 	C1 C2 C1 C1 C1 C3 C1 C3 C2 C3

			<ul style="list-style-type: none">• Explain age and sex composition of a population• Calculate sex ratio from a given data	
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PHARMACOLOGY (SGD)

PRACTICAL				
PK Calculations I	<ul style="list-style-type: none">• Calculation for loading dose• Calculation for maintenance dose	P	Practical	OSPE
PK Calculations II	<ul style="list-style-type: none">• Calculations for maintenance dose• Calculations for plasma half-life & steady state concentration	P	Practical	OSPE
P drug & Prescription writing	<ul style="list-style-type: none">• P drug & prescription writing for infertility• P drug & prescription writing for premature labour	P	Practical	OSPE
CBL				
Hormonal Contraceptives	<ul style="list-style-type: none">• Clinical pharmacology of hormonal contraceptives• Rationale of choosing specific hormonal contraceptive in a specific scenario	C3	CBL	PBQ
Oxytocic and uterine relaxants	<ul style="list-style-type: none">• Clinical pharmacology of Oxytocic drugs & Uterine relaxants• Rationale of choosing specific agents in specific scenerios	C3	CBL	PBQ

PATHOLOGY (SGD)

S.No.		Content Outlines(Major Topics & Sub Topics)	• Learning Objectives	Level of cognition	
1.	Pathology of early pregnancy complications & Non neoplastic placental pathology			C3 C3 C2	MCQs, SEQs, OSPE Viva
2.	GTD & Choriocarcinoma	Gestational trophoblastic diseases and choriocarcinoma	Explain Pathological features, diagnosis and followup of Gestational Trophoblastic Disease. Enlist difference between complete and partial mole Describe incidence and pathological features of Choriocarcinoma	C2 C1 C2	MCQ,SEQ,VIVA
3.	Dysfunctional uterine bleeding	Dysfunctional uterine bleeding	Describe causes and pathogenesis of Functional Endometrial Disorders (Dysfunctional Uterine Bleeding) and Inflammatory Disorders.	C2 C3	MCQ,SEQ,VIVA

			Interpret diagnosis via morphological features of endometriosis and Adenomyosis & Endometrial Polyps		
4.	Benign and Premalignant Lesions of Cervix		Describe Etiology and morphology of Acute and Chronic Cervicitis Categorize Endocervical Polyps and Metaplasias Describe risk factors etiology pathogenesis of	C2 C2 C2	MCQS,SEQ,VIVA
5.	BPH, prostatic cancer, testicular atrophy, seminoma	BPH, prostatic cancer, testicular atrophy, seminoma	Describe Etiology and morphology of BPH, prostatic cancer, testicular atrophy, seminoma Enumerate investigations for investigations	C2	MCQS, SEQ, VIVA

Self- Directed Learning (SDL) Gynae/Obs

Sr. No	Content Outlines(Major Topics & Sub Topics)	<ul style="list-style-type: none"> Learning Objectives 	Learning Resource	Assessment tool
1.	Renal Disease in Pregnancy	<p>Discuss the Effect of pregnancy on CKD</p> <p>Explain the Effect of CKD on pregnancy outcome</p> <p>Enlist fetomaternal complications associated with dialysis</p> <p>Discuss the fetomaternal outcome of Pregnancy in women with renal transplants.</p>	<p>Obstetrics by Ten Teachers (20th edition)</p> <p>Page 148</p>	MCQs
2.	Heart Disease in Pregnancy	<p>Discuss Pre-pregnancy counseling of heart disease in pregnancy.</p> <p>Elaborate antenatal management of heart disease in pregnancy.</p> <p>Discuss management of labour and delivery in patients with heart disease in pregnancy</p> <p>Discuss the treatment of heart failure in pregnancy</p>	<p>Obstetrics by Ten Teachers (20th edition)</p> <p>Page 155</p>	MCQs
3.	Respiratory Disease in Pregnancy Asthma in pregnancy	<p>At the end of lecture, students will be able to:</p> <p>A) explain the effects of pregnancy on asthma</p> <p>B) explain risk factors, clinical features and investigations to confirm diagnosis</p> <p>C) discuss treatment plan and appropriate medication to control asthma in pregnancy</p>	<p>Obstetrics by Ten Teachers (20th edition)</p> <p>Page 158</p>	MCQs
4.	Neurological Disease in Pregnancy Epilepsy	<p>At the end of lecture, students will be able to:</p> <p>A) explain how does epilepsy effects pregnancy</p> <p>B) Enlist antiepileptics drugs which are safe in pregnancy and breastfeeding</p>	<p>Obstetrics by Ten Teachers (20th edition)</p> <p>Page 160</p>	MCQs

		C) Devise management plan and discuss complications of epilepsy for both fetus and the mother		
5.	Haematological Abnormalities Thrombotic disorders in pregnancy	At the end of the lecture, students will be able to: A) explain etiologies and prevalence of thrombocytopenia in pregnancy B) management of delivery in thrombocytopenia, keeping in mind both maternal and neonatal considerations C) brief overview of liver diseases during pregnancy and their management individually	Obstetrics by Ten Teachers (20 th edition) Page 162	MCQs
6.	Covid-19 in Pregnancy and Immunization	• discuss guidelines of covid 19 in pregnancy and dengue in pregnancy.	WHO guidelines of Covid-19 in pregnancy	MCQs
7.	HIV in Pregnancy	• discuss guidelines of HIV in pregnancy. • discussion regarding the management of HIV in pregnancy.	Obstetrics by Ten Teachers (20 th edition) Page 184	MCQs

Self Directed Learning (SDL) Community Medicine

#	Major topic	Contents Outlines / Sub- Topics	Learning objectives. Students will be able to ...	Learning resource	Assessment tool -MCQs
1	Child Abuse	Child abuse Street children Child trafficking Child labor Child marriage	To comprehend definitions, causes and preventive approaches. • to child, abuse as trafficking, • child labor • child marriage		2-3MCQ
2	Population medicine	Pakistan demographic surveys National demographic database (NADRA) Population pyramid	• To comprehend demographic information sources, methods and national demographic database. • Explain population graphic presentation / Pyramid	Ilyas & Ansari Pages 178- 184	2-3MCQs
3	Population medicine	National population control strategy & policy (Pakistan)	Students should be able to: • Explain element of national pop cont strategy • Explain national pop control policy • Population control action program	• Practical Journal of Com-Med Annexure III. • https://pwd.punjab.gov.pk/ • https://www.pc.gov.pk/uploads/plans/Ch4-Population2.pdf	2-3 MCQs
4	Reproductive health	Preventive aspects of neonatal health. Elements of early neonatal care	Students should be able to: Describe. • early neonatal care • Immediate neonatal care • Early neonatal examination • Neonatal screening	K Park Ed. 27 th (532-535)	3 MCQs
5	Child Health in context of MCH Services	Monitoring of child growth & development	Students should be able to • Describe determinants of child growth & development • Describe methods assessment of physical growth of child • Explain formation of growth chart.	K Park Ed. 27 th (541,42,43,44, - 47	3MCQs

Self Directed Learning (SDL) Pharmacology

Sr. No.	Topic	Learning objectives	Reference
1.	Pharmacological management of dysmenorrhea	<ul style="list-style-type: none"> Recall the pathophysiology of dysmenorrhea Enlist short and long term management strategies of dysmenorrhea Discuss the salient pharmacological feature of different strategies 	<ul style="list-style-type: none"> Mittal R. Medical management of Dysmenorrhea. International Journal of Advance Research, Ideas and Innovations in Technology. 2019;5(1). Harel Z. Dysmenorrhea in adolescents and young adults: an update on pharmacological treatments and management strategies. Expert opinion on pharmacotherapy. 2012 Oct 1;13(15):2157-70.
2.	Novel endocrine therapies for hormone positive breast cancer	<ul style="list-style-type: none"> Enumerate hormonal treatments of breast cancer Discuss the mechanism of action of SERM and SERD in breast cancer Give new therapies acting via nuclear estrogen receptors in breast cancer 	<ul style="list-style-type: none"> Lloyd MR, Wander SA, Hamilton E, Razavi P, Bardia A. Next-generation selective estrogen receptor degraders and other novel endocrine therapies for management of metastatic hormone receptor-positive breast cancer: current and emerging role. <i>Therapeutic Advances in Medical Oncology</i>. 2022;14. doi:10.1177/17588359221113694
3.	Use and abuse of anabolic steroids	<ul style="list-style-type: none"> Differentiate between androgens and anabolic steroids Discuss the clinical application of anabolic steroids Give the organ effects of anabolic effects Identify the health consequences of abuse of anabolic steroids 	<ul style="list-style-type: none"> Gagliano-Jucá T, Basaria S. Abuse of anabolic steroids: A dangerous indulgence. <i>Current Opinion in Endocrine and Metabolic Research</i>. 2019 Dec 1;9:96-101.
4.	Hormonal therapy for prostate cancer (GnRH antagonist VS ADT)	<ul style="list-style-type: none"> Identify different agents used in prostate cancer Recognize the role of different hormone receptors in prostate cancer 	<ul style="list-style-type: none"> Rice MA, Malhotra SV, Stoyanova T. Second-generation antiandrogens: from discovery to standard of care in castration resistant prostate cancer. <i>Frontiers in oncology</i>. 2019 Aug 28;9:801.

		<ul style="list-style-type: none">• Describe the clinical merits and demerits of different treatment options	<ul style="list-style-type: none">• Freedland SJ, Abrahamsson PA. Androgen deprivation therapy and side effects: are GnRH antagonists safer? Asian J Androl. 2021 Jan-Feb;23(1):3-10. doi: 10.4103/aja.aja_22_20. PMID: 32655041; PMCID: PMC7831824.• Fontana F, Marzagalli M, Montagnani Marelli M, Raimondi M, Moretti RM, Limonta P. Gonadotropin-releasing hormone receptors in prostate cancer: molecular aspects and biological functions. International Journal of Molecular Sciences. 2020 Dec 14;21(24):9511.
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Self Directed Learning (SDL) PATHOLOGY

R. NO	TOPIC	LEARNING OUTCOMES At the end of session students will be able to:	REFERENCE
1	Diseases of Penis	<ul style="list-style-type: none"> • Abnormalities /Malformations of Penis • Describe briefly about inflammatory diseases of Penis • Explain Neoplastic lesion of Penis 	Robbins Basic Pathology 9 th Edition Chapter 17 Male Genital System Pg 658-659
2	prostatitis	<ul style="list-style-type: none"> • Categorize different types of prostatitis • Explain etiology • clinically presentation of prostatitis • diagnosis of prostitis 	Robbins Basic Pathology 9 th Edition Chapter 17 Male Genital System

			Pg 663-664
3	Fibrocystic changes of Breast	<ul style="list-style-type: none"> • explain fibrocystic changes of breast • explain briefly types of changes • describe the morphology • how the fibrocystic changes are related to breast carcinomas 	Robbins Basic Pathology 9 th Edition Chapter 17 Female Genital System Pg 705-707
4	Polycystic ovarian disease	Define PCOD What are clinical presentation of PCOD Investigation of pcod Morphological changes of PCOD	Robbins Basic Pathology 9 th Edition Chapter 17 Female Genital System Pg 695 - 696
5	Disorders of uterus	Define Endometriosis Etiology and clinical features of endometeriosis Morphology of endometriosis Describe adenomyosis	Robbins Basic Pathology 9 th Edition Chapter 17 Female Genital System
			Pg 689 - 690

SECTION III

Basic And Clinical Sciences (Vertical Integration)

Content

- Anatomy
- Physiology
- Surgery and Allied
- Medicine and Allied

Basic And Clinical Sciences (Horizontal integration) Content

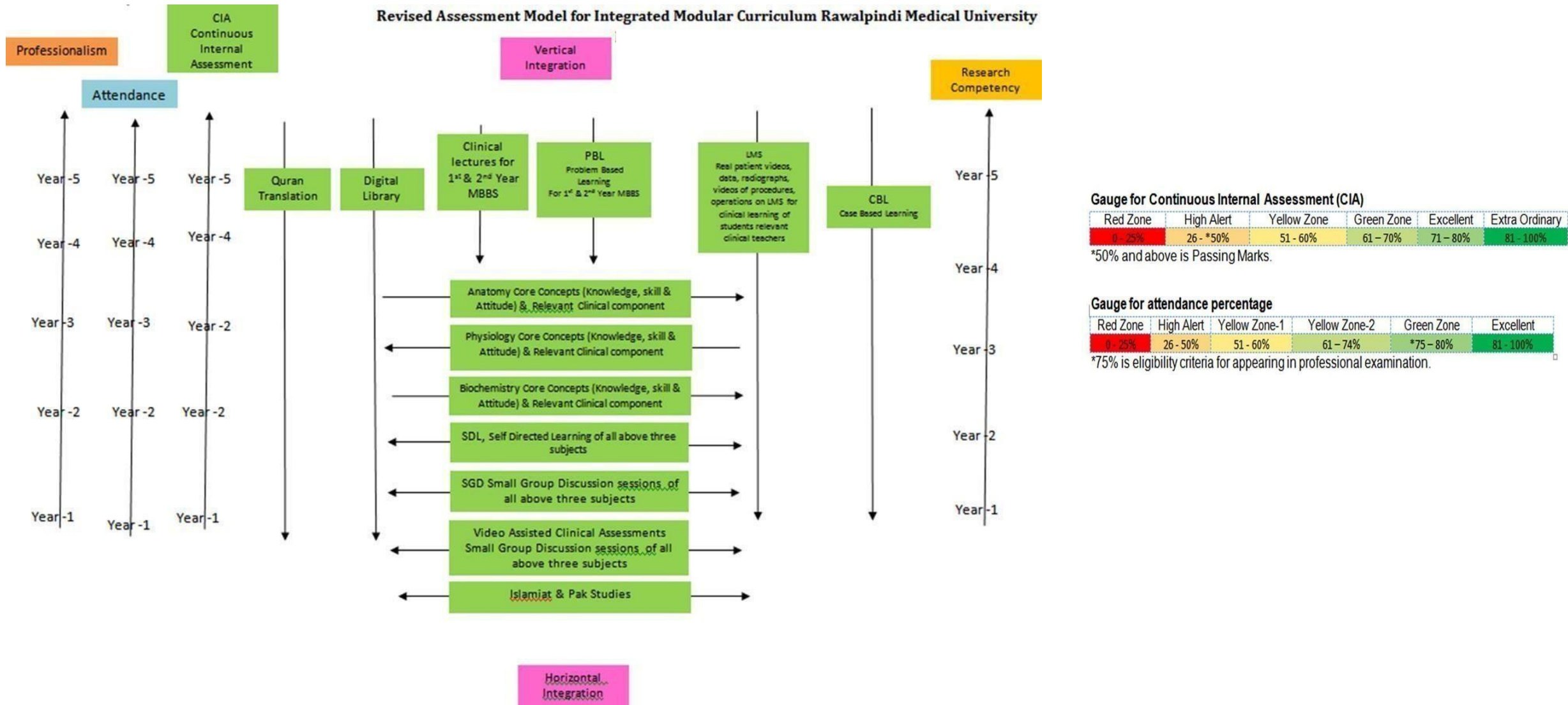
- Community medicine
 - Pharmacology
 - Pathology
-

Assessment Policies

Contents

- Assessment plan
 - Types of Assessment:
 - Modular Examinations
 - Block Examination
 - Table 4: Assessment Frequency & Time in Population
medicine and reproduction Module
-

Assessment Policies



Assessment plan

University has followed the guidelines of Pakistan Medical and Dental Council for assessment. Assessment is conducted for SDL, SGD, mid modular, block/module levels.

Types of Assessment:

The assessment is formative and summative.

Formative Assessment

Formative assessment is taken from topics of SDL on LMS and MS team

Summative Assessment:

Summative assessment is taken at the mid modular, modular/block levels.

Modular Examinations

Theory Paper

There is a module examination at the end of module. The content of the whole teaching of the module are tested in this examination.

It consists of paper with objective type questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module. (Annexure I attached)

Block Examination

On completion of a block which consists of two modules, there is a block examination which consists of one theory paper and OSPE.

Theory Paper

There is one written paper for each subject. The paper consists of objective type questions (MCQ) and structured essay questions (SAQ). The distribution of the questions is based on the Table of Specifications of the module.

Block OSPE/OSCE

This covers the practical content of whole block.

ASSESSMENT PLAN

Types of Assessment:

1. Formative
2. summative

Formative Assessment

Formative assessment will be done at the mid of module of SDL and SGD through LMS at end of 3rd week. Assessment of clinical lectures on LMS. Tool for this assessment will be one bestchoice question.

Summative Assessment:

Summative assessment will be taken at the end of module, block and will be subject wise.

MID MODULE EXAM

It will be taken at the end of 3rd week of module. Theory Paper (50 MCQS) 50 marks based on table of specifications (TOS).

BLOCK EXAMINATION

On completion of a block which consists of reproduction + modules, there will be a block examination which consists of one theory paper of each subject and OSPE of (COMMUNITY MEDICINE, PHARMACOLOGY, PATHOLOGY).

The paper will be of objective type questions and short answer questions. The distribution of the questions will based on the Table of Specifications of the module.

OSPE:

This will cover the practical content of whole block.

Schedule of Assessment REPRODUCTION MODULE/BLOCK

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Remarks	Remarks	Colander schedule
1 st	One best option MCQs test	CIA	Mid module at the end of 03 weeks	LMS	Credit will be part of IA	2023
2 nd	MCQ, SAQs, based examination	CIA	End of module /block exam	On campus test	Credit will be part of IA	2023
3 rd	OSPE	CIA	End of module /block exam	On campus test	Credit will be part of IA	2023

Assessment Frequency & Time In Reproduction Module

Block		Reproduction Module	Type of Assessments	Total Assessments Time		
Reproduction Block	Sr #	Reproduction Module Components		Assessment Time		
	1	Mid Module Examinations (50 marks ,50 MCQs)	Formative	50 Minutes		
	2	Topics of SDL and SGD Examination on LMS and MS Team 10 MCQS every Tuesday (for 7 weeks)	Formative	30 Minutes		
	3	End Module Examinations (10 SAQS & 100 MCQs)	Summative	120 Minutes		
	4	OSPE (Community medicine, Pharma, Patho)	Summative			
	5	Ward test at the end of 4 weeks 10 SAQS, 50 MCQS	Formative	90 Minutes		

Table of Specification (TOS)

MID MODULE ASSESSMENT

Fourth Year MBBS 2023 15th

AUGUST 2023

Sr. #	Discipline	No. of MCQs	No. of MCQs according to cognitive domain			Total
			C1	C2	C3	
1.	Obs/Gynae	10	01	02	07	
2.	Pharmacology	05	01	03	01	
3.	Pathology	05	01	03	01	
4.	Community Medicine	05	01	03	01	
5.	Surgery	02			02	
6.	Paediatrics	03		01	02	

END OF BLOCK / MODULE ASSESSMENT

Fourth Year MBBS 11

SEPTEMBER 2023

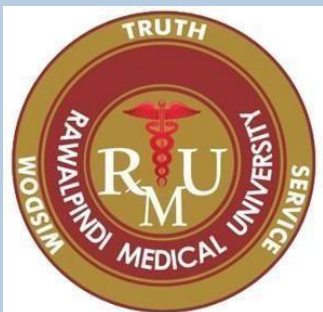
03	Discipline	No. of MCQs(%)	No. of MCQs according to cognitive domain			No. of SAQs (%)		No. of SAQs according to cognitive domain			Total	OSPE	VIVA
			C1	C2	C3	No. of items	Mark s	C1	C2	C3			
1.	Obs/Gynae	30	03	07	20	02	10			02			
2.	Community `Medicine	15	03	05	07	02	10			02		20	20
3.	Pharmacology	10	03	03	04	05	25			05			20
4.	Pathology	25				05	25			05		30	20
5.	Surgery	05	01	01	03	01	05			01			
6.	Paediatrics	10	01	03	06	01	05			01			
7.	Medicine	05	01	01	03	01	05			01			
											190		

Internal assessment break up

End of block assessment 50% (30 marks)	Work Place Based Assessment 50% (30 marks)			
	Ward test	Evening ward duties	Histories	Case presentation
	50%	10%	20%	20%
	15	03	06	06
		More than 3 = 1.5 marks Less than 3 = 0 marks	Complete 5 histories = 06 marks Incomplete 5 histories = 04 marks Less than 5 histories = zero marks	1 case presentation = 06 marks No case presentation = zero marks

4TH YEAR OBS/GYNAE CLINICAL CLERKSHIP HOSPITAL

Morning: 10.30 am to 02.00 pm



Day	Specialty	Topic	SPECIFIC LEARNING DOMAINS			COGNITION			PSYCHOMOTOR		AFFECTIVE		MI T
			Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2	
FIRST WEEK(ROTATION 1)													
Monday	OBS	Basic antenatal care/ Obstetric history taking/Examination /Antenatal card filling		*	*	*			*		*		Bedside teaching
Tuesday		Hypertensive disorders in pregnancy		*	*	*	*						SGD
Wednesday		Diabetes in pregnancy		*	*		*		*		*		Bedside teaching
Thursday		Anemia in pregnancy		*	*		*		*		*		Bedside teaching
SECOND WEEK													
Monday	OB S	Diagnosis of labour/ Stages/ Management of normal labour				*	*						SGD/LR
Tuesday		Types of Abnormal labour/ Malposition / Managaement including operative deliveries		*	*			*	*		*		SGD
Wednesday		3 rd stage of labour and complications including PPH		*	*		*		*		*		SGD/LR
Thursday		Hands on drill(Meachanism of labor/CTG/partogram/maternal resuscitation											Skills lab
THIRD WEEK (ROTATION II)													

Monday		Multiple pregnancy											Skills lab
Tuesday		PTL/PPROM											
Wednesday		APH											
Thursday		IUGR											
FOURTH WEEK													
Monday		Puerperium/ breastfeeding/contraception											
Tuesday		Rh incompatibility											
Wednesday		Hans on drill (Instrumental delivery/ shoulder dystocia/ breech delivery/ neonatal resuscitation)											
Thursday													

WARD TEST (50 MCQS + 10 SAQS)TOTAL MARKS = 100

DAY	Activity -I 10.30 – 11.30 am	Activity – II 11.30- 12:30pm	Activity III 12:30pm to 2:00pm	Sites of teaching- learning	Assessment at the end of rotation
1 ST DAY	History taking and examination of patients supervised by station incharge	Case presentation by students	Presentation of students on allotted topics followed by class by AP/SR	Bedsides (wards+ labor room+ skills lab)	MCQS SAQS
2 ND DAY – 14 th DAY	History taking and examination of patients supervised by station incharge	Case presentation by students	Presentation of students on allotted topics followed by class by AP/SR	Bedsides (wards+ labor room+ skills lab)	MCQS SAQS
15 th Day	Revision of hands-on drills				
16 th DAY	WARD TEST				

COMMUNITY ORIENTED CLERKSHIP MODULE

Theme (AIM):

The primary purpose of this module is to educate students in those areas of the subject of CM&PH which are learnt better by onsite presence of the students at certain sites, processes, agencies which have public health relevance and in general community setting. Moreover some, areas of the subject which demands close interactive teachings in small group like HHS data analysis & report writing skills, contraceptive use skills, vaccination skills, etc are also covered during this rotation. All opportunities available within and outside the institution within affordable logistics, time, are focused for this purpose. A short time of this batch rotation is dedicated for health education communication practices as Health awareness work and other social work.

LEARNING OUTCOMES (LOS):

At the end of this learning module students are expected to achieve following Public health Competencies as will be able to:

1. Undertake a population-based health survey (HHS)
2. Appreciate working of First level Care Facility (Public Sector)
3. Perform Community Immunization / EPI vaccinations.
4. Develop Hospital waste management plans.
5. Develop Community based health awareness message.
6. Communicate for Health awareness in community settings.
7. Commemorate International public health days.
8. Develop Hospital administration Plans.
9. Undertake Preventive healthcare inquiries and NCDs Risk Factors Surveillance
10. Counsel for the contraceptive devices to the community

MODULE OUTLINE:

- A batch comprising 20-22 students is posted in the department of CM & PH for a period of 2weeks (Monday to Thursday-04 hrs. /day & for 32hrs in total). This schedule is run over the whole academic year, till all students of 4th year MBBS class passes through this rotation.
- Batch formation and schedules of rotation for whole class as notified by the DME / Student's section will be followed accordingly.
-
- At commencement of the academic year overall batch learning module coordinator, nomination of batch in-charges, senior faculty in charges and calendar schedule of batch rotation for all batches over the whole academic year will be notified by the Department of CM & PH.

Domains of learning: learning will occur in all the three domains C, A & P

SOPS OF LEARNING & ASSESSMENTS:

- Active participation will be graded by the batch in charge (under a check list) during the activity / session and grades/marks will be entered in the practical manual as out of 05 (Max marks 05) by the batch in charge. 05 Max Marks are reserved for CHC (HMDTD and Health awareness work.
- Assessment will be done by OSPE / MCQs Exam / Viva voce at the end of each module and credit will be objectively recorded for the purpose of internal assessment. (Max mark 10)
- General assessment of the subject learning will be through MCQs, SEQs & OSPE on the relevant subjects in the relevant end of modules, block exams and Send up Exams.
- Students are required to report / write the relevant work in Practical Journal, House Hold Survey Report Book and log all the clerkship activities in the Logbook on daily basis.

DAY	Activity -I 10.30 – 11.00	Activity – II 11.00- 11.30am	Activity III 11.30- 01.00pm	Act-V 01.00 – 2.00pm	Sites of teaching- learning	Assessment	Session outcome (level of learning)
	Session topic	Session topic	Session topic	Session topic			
1 ST DAY	instructing / demonstration on Practical Manual based Assignments	Visit to CHC • SGIS on Health days commemoration work, Display material, PPT.	• SGIS on HMDTD practicum. Topic finalization, CHC- Message draft outlines finalization.	<ul style="list-style-type: none"> PPT based Demo on How to conduct & report HHS. Guidelines on PHI work to be done during clinical rotations / ward duties 	<ul style="list-style-type: none"> Demonstration on n / lec Hall 3 CHC - Dept. CM NTB RMU. 	<ul style="list-style-type: none"> 1-2 OSPE in end of clerkship exam (credit will part of IA) Assessment of HHS -Report (Max marks:5 part practical /viva exam 4th Prof MBBS) 	<ul style="list-style-type: none"> Construct a health message. (C6) Prepare Health days commemoration stuff, Display material, PPT, (P) Undertake a health survey. (HHS) (C3)
2 ND DAY	Follow up session on. - HM-DTD work - HHS work - health days commemoration work	SGIS/ Briefing / PPT based guidelines on field visit of the day (EPI services center HFH)	FV to the EPI center HFH	Health awareness work (HAW)	<ul style="list-style-type: none"> Demo Room, EPI Center HFH OPD, hospital shelters sites for health awareness work (HAW 	<ul style="list-style-type: none"> 1-2 OSPE in end of clerkship exam (credit will part of IA) Grade of performance in EPI visit reporting. Credit of HAW 	<ul style="list-style-type: none"> Explain cold chain component at EPI center Vaccinate (EPI) vaccines to the clients. Comprehend EPI system

DAY	Activity -I 10.30 – 11.00	Activity – II 11.00- 11.30am	Activity III 11.30- 01.00pm	Act-V 01.00 – 2.00pm	Sites of teaching- learning	Assessment	Session outcome (level of learning)
	Session topic	Session topic	Session topic	Session topic			
3 RD DAY	Follow up session on HM- DTD work & HHS	SGIS / Briefing / PPT based guidelines on FV to MCH & FP Services Center HFH	FV to the MCH services & FP center HFH	Health awareness work (HAW)	<ul style="list-style-type: none"> • FP Center HFH • OPD, hospital shelters sites for HAW 	<ul style="list-style-type: none"> • 1-2 OSPE in end of clerkship exam (credit will part of IA) • Grade of performance in EPI visit reporting. Credit of HAW	<ul style="list-style-type: none"> • Identify CP devices available at MHC FP center • Counsel clients for use of a contraception method Place CP devices to client (P)
4 TH DAY	Follow up session on HM- DTD work & HHS	Briefing / guidelines on FV Hospital waste disposal system in hospitals	<ul style="list-style-type: none"> • FV to the hospital waste disposal system & relevant sites / Incinerator 	Health awareness work (HAW)	<ul style="list-style-type: none"> • FP Center HFH OPD, hospital shelters sites for HAW 	<ul style="list-style-type: none"> • End of module OSPE • Grade of performance in visits to sites 	<ul style="list-style-type: none"> • Explain hospital waste disposal system • Develop a hospital waste management plan • Explains various domains of hospital management (C2)

DAY	Activity -I 10.30 – 11.00	Activity – II 11.00- 11.30am	Activity III 11.30- 01.00pm	Act-V 01.00 – 2.00pm	Sites of teaching- learning	Assessment	Session outcome (level of learning)
	Session topic	Session topic	Session topic	Session topic			
5 TH DAY	SGIS / PPT based briefing on Hospital management & administrati on	Visit to Hospital management & administration (HFH) office	Health awareness work (HAW		HFH	<ul style="list-style-type: none"> End of module OSPE Grade of performance in visits to sites	
6 TH DAY	SGIS / PPT based briefing on visit to First level of health care facility (FLCF) BHU/RHC	Field visit to RHC Khayaban Sir-Syed (RHC) or BHU	<ul style="list-style-type: none"> Demo room / lec Hall 3 NTB / CPC-Hall. RHC / BHU 	Health awareness work (HAW at site visited	<ul style="list-style-type: none"> End of module OSPE Report credit in PJ		<ul style="list-style-type: none"> Explain working of FLCF Appreciate PHC elements at FLCF.

7 TH DAY	Health days commemoration (walk/ seminar/ presentation/ CHC-message dissemination work (10.30 – 12.00pm)	12.00 – 2.00pm • Completion & assessment of relevant Practical Journal work, • HHS-report book, • Logbook etc. Feedback discussion on PHI	• Communication skills • Comprehend frequency Preventable RFs of NCDs in the real population (RF surveillance) Undertake a preventive Healthcare inquiry
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CLINICAL TRAINING ROTATIONS 4TH YEAR MBBS CLASS (SESSION 2019-2020) STARTING

w.e.f 06-03-2023 ENDING 03-12-2023.

Date	Medicine /Neurology DHQ	OBS/GYN HFH I & II	OBS/GYN BBH & DHQ	C.MED	E.N.T. H.F.H.	E.N.T. B.B.H	E.N.T. D.H.Q	Medicine DHQ	EYE H.F.H	EYE B.B.H.	EYE DHQ	PEADS H.F.H	PEADS B.B.H.	CARDIO	PATH	NEURO SURGE RY
06-03-2023 To 19-03-2023	A	B1, HFH-1 B2, HFH-2	C1, BBH C2, DHQ	D	E	F	G	H	I	J	K	L	M	N	O	P
20-03-2023 To 02-04-2023	B	C1, HFH-1 C2, HFH-2	D1, BBH D2, DHQ	E	F	G	H	I	J	K	L	N		O	P	A
03-04-2023 To 16-04-2023	C	D1, HFH-1 D2, HFH-2	E1, BBH E2, DHQ	F	G	H	I	J	K	L	M		O	P	A	B
17-04-2023 To 07-05-2023 Spring V.	D	E1, HFH-1 E2, HFH-2	F1, BBH F2, DHQ	G	H	I	J	K	L	M	N	P		A	B	C
08-05-2023 To 28-05-2023 Sport W.	E	F1, HFH-1 F2, HFH-2	G1, BBH G2, DHQ	H	I	J	K	L	M	N	O		A	B	C	D
29-05-2023 To 11-06-2023	F	G1, HFH-1 G2, HFH-2	H1, BBH H2, DHQ	I	J	K	L	M	N	O	P	B		C	D	E

12-06-2023 To 31-07-2023 Summer V.	G	H1, HFH-1 H2, HFH-2	I1, BBH I2, DHQ	J	K	L	M	N	O	P	A		C	D	E	F
01-08-2023 To 13-08-2023	H	I1, HFH-1 I2, HFH-2	J1, BBH J2, DHQ	K	L	M	N	O	P	A	B	D		E	F	G
14-08-2023 To 27-08-2023	I	J1, HFH-1 J2, HFH-2	K1, BBH K2, DHQ	L	M	N	O	P	A	B	C		E	F	G	H
28-08-2023 To 10-09-2023	J	K1, HFH-1 K2, HFH-2	L1, BBH L2, DHQ	M	N	O	P	A	B	C	D	F		G	H	I
11-09-2023 To 24-09-2023	K	L1, HFH-1 L2, HFH-2	M1, BBH M2, DHQ	N	O	P	A	B	C	D	E		G	H	I	J
25-09-2023 To 08-10-2023	L	M1, HFH-1 M2, HFH-2	N1, BBH N2, DHQ	O	P	A	B	C	D	E	F	H		I	G	K
09-10-2023 To 22-10-2023	M	N1, HFH-1 N2, HFH-2	O1, BBH O2, DHQ	P	A	B	C	D	E	F	G		I	J	K	L
23-10-2023 To 05-11-2023	N	O1, HFH-1 O2, HFH-2	P1, BBH P2, DHQ	A	B	C	D	E	F	G	H	J		K	L	M
06-11-2023 To 19-11-2023	O	P1, HFH-1 P2, HFH-2	A1, BBH A2, DHQ	B	C	D	E	F	G	H	I		K	L	M	N

20-11-2023 To 03-12-2023	P	A1, HFH-1 A2, HFH-2	B1, BBH B2, DHQ	C	D	E	F	G	H	I	J	L		M	N	O
Date	Medicine /Neurology DHQ	OBS/GYN HFH I & II	OBS/GYN BBH & DHQ	C.MED	E.N.T. H.F.H.	E.N.T. B.B.H.	E.N.T. D.H.Q	Medicine D.H.Q	EYE H.F.H	EYE B.B.H.	EYE DHQ	PEADS H.F.H	PEADS B.B.H.	CARDIO	PATH	NEURO SURGE RY

Learning Resources

Subject	Resources
OBS/GYNAE	<ul style="list-style-type: none">• Gynaecology by ten teachers 20th edition• Obstetrics by ten teachers 20th edition
Community Medicine	<ul style="list-style-type: none">• Park's Textbook of Preventive and Social Medicine, 26th edition, Chapter 3, 4, 5• Textbook of Community Medicine by Muhammad Ilyas and Dr Irfanullah Siddiqi• Epidemiology by Leon Girdis

Time Table

Integrated Clinically Oriented Modular Curriculum for Fourth Year MBBS

REPRODUCTION MODULE TIME TABLE

Fourth Year MBBS

Session 2023 – 2024

DURATION OF MODULE: 7 WEEKS
CORDINATOR: DR SADIA KHAN
CO-ORDINATOR: DR ISMAT BATOOL
REVIEWED BY: MODULE COMMITTEE
MEMBERS OF MODULE COMMITTEE

PROF.DR.MUHAMMAD UMAR	Chairman	VICE CHANCELLOR RMU
Prof .Dr Lubna Ejaz	Dean of OBS & Gynae	OBS &Gynae department
Assoc Prof Dr.Asma khan	Associate dean of basic sciences	Pharmacology Department
Prof. Dr Sana Bilal	Incharge 4 th year Modular Curriculum	Community Medicine Department
Dr Omaima Asif	Overall Modular Coordinator	Pharmacology Department
Dr Haseeba Talat	Focal Person	Pharmacology Department
Dr Unaiza	Focal Person	Pathology Department
Dr Shehzad Manzoor	Focal Person	Medicine Department
Dr Usman Qureshi	Focal Person	Surgery Department
Dr Gul Meher	Focal Person	Community Medicine Department
Dr Asad Shabbir	Focal Person	Pediatrics Department

APPROVED BY: CURRICULUM COMMITTEE RMU

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK

TENTATIVE TIME TABLE 4TH YEAR MBBS-POPULATION MEDICINE & REPRODUCTION MODULE 2023-2024 (FIRST WEEK)

DATE / DAY	8:00 AM – 9:00 AM	9:00 AM – 10:00 AM		<u>10:30 AM – 2:00 PM</u>
Monday (24-07-23)	ANATOMY	PHYSIOLOGY		CLINICAL CLERKSHIP
	Female bony pelvis, Fetal skull (REVISIT LECTURE) DHQ Dr Shama Dr Ruqaiyah	Physiological changes in pregnancy (REVISIT LECTURE) BBH Dr Nighat Dr humera Masood		
Tuesday (25-07-23)	OBS (LGIS)	COMMUNITY MEDICINE (LGIS)		
	Basic terminology in Obstetrics, Basic antenatal care Gynae Unit I Dr. Humaira Bilqis Dr. Saima Shoaib	Preventive medicine in obs-I Assc Prof) Dr. Khola, (Asst Prof) Dr.Gulmehar)		
Wednesday (26-07-23)	COMMUNITY MEDICINE (LGIS)	OBS (LGIS)		
	Preventive medicine in obstetrics –II Dr. Khola Dr.Gulmehar	Management of premalignant & malignant disease of cervix Gynae-II Dr. Khansa Iqbal Dr. Aqsa		

Thursday (27-07-23)	PHARMACOLOGY (LGIS)	OBS (LGIS)		
	Gonadal Hormones -I DrAsma Dr Zunera	Diagnosis of 1 st stage of labour, its management and abnormalities Ctg, patogram Gynae Unit-II Dr Khansa Dr Aqsa		

Friday (28-07-23)				
	09 TH MOHARRAM			
Saturday (29-07-23)				
	10 TH MOHARRAM			

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK					
TENTATIVE TIME TABLE 4 TH YEAR MBBS-POPULATION MEDICINE & REPRODUCTION MODULE 2023 (SECOND WEEK)					
DATE / DAY		8:00 AM – 9:00 AM	9:00 AM – 10:00 AM	10:30 AM – 12:00PM	
Monday (31-07-23)	Anasthesia(LGIS)	OBS (LGIS)		CLINICAL CLERKSHIP	
	Pain management during labor Dr Ammara Dr Ayesha	2 nd stage of labour, mechanism of normal labour. Gynae Unit I Dr Saima Khan Dr Saima Anwar			
	OBS (LGIS)	y(LGIS)			
Tuesday (01-08-23)	Episiotomy/ instrumental delivery Gynae Unit II Dr. Maliha Sadaf Dr. Aqsa Ikram	Pelvic cellulitis & abscess Dr Hina (BBH) Dr Ali Kamran (DHQ)			
Wednesday (02-08-23)	OBS (LGIS)	PATHOLOGY (CBL)			
	Abdominal Delivery BBH Dr Ismat Batool Dr Humaira Masood	Rh incompatabilitiy anemia and diseases in pregnancy Dr Abid Dr Saeed Dr Nida Dr Mahjabeen			
Thursday (03-08-23)	OBS(LGIS)	COMMUNITY MEDICINE (LGIS)			
	3 rd stage of labor & its complications (retained placenta/ uterine inversion) DHQ Dr Sobia Dr Tabinda	Preventive medicine in obstetrics III(Postnatal care) Dr. Khola, Dr. Gulmehar			

Friday (04-08-23)	08:00am 09:45am		9.45-10.30 am		10:30 -11:15 am		11:15am-12:00pm			
	COMMUNITY MEDICINE (LGIS)	PHARMACOLOGY (Practical)	OBS (LGIS)		OBS (LGIS)		Psychiatry (LGIS)			
	Demonstration on CP devices/methods Evaluation of contraceptive methods Preventive aspects of breast feeding Dr Ayesha PGT1 Dr Bushra PGT 2	PK Calculation I Dr Zoofishan Dr Zaheer	Postpartum Hemorrhage and its management. Gynae Unit I Prof. Lubna Ejaz Dr. Farah		Puerperium & its complications Gynae Unit II Dr. Khansa Iqbal Dr. Saira Ahmed		Puerperal psychosis Dr Zona			
	ODD	EVEN								
	08:00am 09:45am		09:45am – 10:30am		10:30 -11:15 am					
Saturday 05-08-23	COMMUNITY MEDICINE (LGIS)	PHARMACOLOGY (Practical)	GYNAE(LGIS)		PHARMACOLOGY (LGIS)		Break 11:15s m-11:45am	11:45am-12:30pm	12:30-1:15 pm	1:15-2:00 pm
	Demonstration on CP devices/methods Evaluation of contraceptive methods Preventive aspects of breast feeding Dr Ayesha PGT1 Dr Bushra PGT 2	PK Calculation 1 Dr Zoofishan Dr Zaheer	Contraception BBH Dr Hina Dr Asma Khan		Gonadal hormones –2 Dr Asma Dr Zunera			SURGERY(L GIS)	ANESTHESIA (LGIS)	OBS SGD
								Complications of laparotomy (visceral and vascular injuries) Dr Faryal (HFH) Dr Waqas (SU-I HFH)	Fluid balance & blood transfusion Dr Ammar Dr Ayesha	Mechanism of normal labor and placental delivery DHQ Dr Shama Dr Ruqaiyah
	EVEN	ODD								

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK
TENTATIVE TIME TABLE 4THYEAR MBBS-POPULATION MEDICINE & REPRODUCTION MODULE 2023 (THIRD
WEEK)

	8:00 AM – 9:00 AM	9:00 AM – 10:00 AM		<u>10:30 AM – 12:00</u> PM	
Monday 7.08.23	PEADS(LGIS)	OBS (SGD)		CLINICAL CLERKSHIP	
	Neonatal resuscitation Dr Mansoor afzal Dr Hafeez	Malpresentations Gynae Unit I Prof Lubna Ejaz Dr Tahira			
Tuesday 8.08.23	PHARMACOLOGY (LGIS)	OBS (LGIS)			
	Gonadal hormones-3 Dr Asma Dr Zunera	Early pregnancy complications (miscarriages & Ectopicpregnancy) DHQ DrSobia Dr Tabinda			
Wednesday 9.08.23	OBS (LGIS)	OBS (LGIS)			
	Multiple pregnancy Gynae Unit II Dr. Maliha Sadaf Dr. Aqsa Ikram	Antepartum hemorrhage BBH Dr Nighat Dr Shumaila			
Thursday 10.08.23	COMMUNITY MEDICINE (LGIS)	OBS (LGIS)			
	Family Planning, Population control approach and practice FP-I+II	Perinatal infections DHQ Dr Sobia Nawaz Dr Tabinda			
	Dr Afifa Dr Mamoona				

	8:00am-9:45am		09:45am – 10:30am	10:30 -11:15 am	11:15am-12:00pm			
Friday (11-08-23)	COMMUNITY MEDICINE	PATHOLOGY (PRACTICAL)	QURAN CLASS	OBS (LGIS)	PEADS			
	IUGRC-VI All demonstrator and PGTs ODD	Ovarian teratoma and hydatiform mole Dr Faiza Zafar EVEN		Preterm labor and PROM Gynae Unit -I Prof Lubna Ijaz Dr Saima Anwar	Breast Feeding Dr Maryam Amjad Dr Jaweria Zia			
	8:00am-9:45am		09:45am – 10:30am	10:30 -11:15 am	11:15-11:45am	11:45-12:30PM	12:30-01:15PM	01:15-2PM
Saturday (12-08-23)	COMMUNITY MEDICINE	PATHOLOGY (PRACTICAL)	PEADS (LGIS)	MEDICINE (LGIS)	B R E A K	PEADS (LGIS)	OBS SGD	OBS SGD
	IUGRC-VI All demonstrator and PGTs EVEN	Ovarian teratoma and hydatiform mole Dr Faiza Zafar ODD	LBW/Prematurity Dr Sumbal Ghazi Dr Saima Akhter	Infection in pregnancy Dr Mujeeb		Immunization Dr Warda Imtiaz Dr Syra Liaqat	COVID 19 in pregnancy Dengue and HIV in pregnancy Gynae unit II Dr Tallat Dr Sabeen	

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK
TENTATIVE TIME TABLE 4TH YEAR MBBS-POPULATION MEDICINE & REPRODUCTION MODULE 2023
(FOURTH WEEK)

	8:00 AM – 9:00 AM	9:00 AM – 10:00 AM		10:30 AM – 12:00 PM
Monday 14.08.23				CLINICAL CLERKSHIP
	INDEPENDENCE DAY			
Tuesday 15.08.23	CARDIOLOGY (LGIS)	OBS(LGIS)		
	Cardiac disease in pregnancy Dr Asad (BBH)	Hypertension in pregnancy DHQ Dr Shama Dr Ruqaiyah		
Wednesday 16.08.23	OBS (LGIS)	MEDICINE (LGIS)		
	IUGR/Oligo Gynae Unit I Dr.Saima khan Dr Ammara	Diabetes in Pregnancy Dr Mujeeb		
Thursday 17.08.23	PATHOLOGY (LGIS)	COMMUNITY MEDICINE (LGIS)		
	Benign diseases of ovary Dr Fatima Dr Sarah	Preventive aspects of neonatal care (Preventive Pediatrics-I Prof Arshad Sabir Dr Khola		

	8:00am-9:45am		09:45am – 10:30am		10:30 -11:15 am		11:15am-12:00pm			
Friday (18-08-23)	COMMUNITY MEDICINE	PHARMACOLOGY (PRACTICAL)	QURAN CLASS	MEDICINE (LGIS)	OBS (LGIS)					
	IUGRC-VII All demonstrator and PGTs ODD	PK Calculation II Dr Zoofishan Dr Zaheer EVEN		Anemia in pregnancy Dr Arif	Rh Incompatability Gynea Unit-II Dr Khansa Iqbal Dr Farah					
	8:00am-9:45am		09:45am – 10:30am		10:30 -11:15 am		11:15-11:45am	11:45-12:30PM	12:30-01:15PM	01:15-2PM
Saturday (19-08-23)	COMMUNITY MEDICINE	PHARMACOLOGY(PRACTICAL)	RADIOLOGY (LGIS)	PEADS (LGIS)	B R E A K	PEADS (LGIS)	MEDICINE (LGIS)	OBS SGD		
	IUGRC-VII All demonstrator and PGTs EVEN	PK Calculation II Dr Zoofishan Dr Zaheer ODD	Imaging in obstetrics& anomaly scan	Neonatal Jaundice Dr Maimoona Qudrat Dr Amal Hashmi		Neonatal Seizure Dr Huma Asghar Dr Naila Ahsan	Liver disorders and Thrombocytopenia in Pregnancy Dr Sadia Ahmed	Medical disorders in pregnancy BBH Dr Nighat Naheed		

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK
TENTATIVE TIME TABLE 4TH YEAR MBBS-POPULATION MEDICINE & REPRODUCTION MODULE 2032 (FIFTH WEEK)

DATE / DAY	8:00 AM – 9:00 AM	9:00 AM – 10:00 AM		10:30 AM – 12:00 PM	12:00 PM – 02:00 PM
Monday (21-08-23)	OBS (LGIS)	NEPHROLOGY (LGIS)			
	Oligo and Polyhydramnios. DHQ Dr Sobia Nawaz Dr Tabinda	Renal Disease in Pregnancy (Dr Asif AP nephron)			
Tuesday (22-08-23)	OBS (LGIS)	MEDICINE (LGIS)			
	Intra-uterine fetal death Gynae Unit I Dr Humaira Bilqis DR Amara	Asthma in pregnancy DR ZAID UMER			
Wednesday (23-08-23)	MEDICINE (LGIS)	PEDIATRICS(LGIS)			
	Epilepsy in pregnancy Dr Waqas Ahmed	IDM Dr Maria Shamsheer Dr Sadaf Iqbal			
Thursday (24-08-23)	COMMUNITY MEDICINE (LGIS)	MEDICINE (LGIS)			
	Preventice pediatrics - II Prof Arshad sabir Dr khola	Thombotic disorders in pregnancy DR ARIF			
	08:00am - 09:45am		09:45am – 10:30am	10:30 -11:15 am	11:15am-12:00pm
	COMMUNITY MEDICINE	PATHOLOGY (PRACTICAL)	Quran class	REPRODUCTION ETHICS(LGIS)	GYN (LGIS)

Friday (25-08-23)	Discussion on demographic measures Dr Muneeba PGT Dr Zaira PGT	Tumors Of Breast Dr Syeda Aisha		Gynae unit 1 Dr Humera Noreen	Management of GTD Gynae Unit II Dr. Maliha Sadaf Dr. Aqsa Ikram				
	ODD	EVEN							
	08:00am - 09:45am				09:45am – 10:30am	10:30 -11:15 am		11:45am-12:30pm	12:30-1:15 pm
	09:45am				Break 11:15s m-11:45 am				
	COMMUNITY MEDICINE (SGD)	PATHOLOGY (PRACTICAL)	GYN-(LGIS)	PATHOLOGY (LGIS)		PATHOLOGY (LGIS)	GYNEA (LGIS)	PATHOLOGY (SGD)	
Saturday (26-08-23)	Discussion on demographic measures Dr Muneeba PGT Dr Zaira PGT	Tumors Of Breast Dr Syeda Aisha	Management of benign and Malignant disease of uterus Gynae Unit I Dr Humera Noreen Dr Amara	Benign diseases of breast (Non-Neoplastic lesions) Dr Amna Dr Mehreen		Malignant diseases of ovary Dr Mobina Dr MUDassira	Management of Benign and malignant ovarian tumors DHQ Dr Shama Dr Ruqaiyah	Pathology od early pregnancy complications and non neoplastic placental pathology Dr Fatima Dr Fariha Dr Amna Dr Sarah	
	EVEN	ODD							

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOC
TENTATIVE TIME TABLE 4TH YEAR MBBS-POPULATION MEDICINE & REPRODUCTION MODULE 2023 (SIXTH WEEK)

DATE / DAY	8:00 AM – 9:00 AM	9:00 AM – 10:00 AM		<u>10:30 AM – 12:00</u> PM	<u>12:00 PM – 02:00</u> PM
Monday (28-08-23)	PATHOLOGY (LGIS)	GYN (LGIS)		CLINICAL CLERKSHIP	
	Benign neoplasm of breast Dr Syeda Fatima Dr Fariha	Management of benign & malignant Disease of vulva & vagina Gyane Unit I Dr Humera Noreen Dr Farah			
Tuesday (29-08-23)	COMMUNITY MEDICINE (LGIS)	PATHOLOGY (LGIS)			
	Demography –I Dr Afifa kalsoom (AP) Dr Imran Younas (AP)	Malignant neoplasm of breast Dr Mobina Dr Wafa			

Wednesday (30-08-23)	GYN (LGIS)	COMMUNITY MEDICINE (LGIS)
	Prenatal diagnosis BBH Dr. Ismat Batool, Dr. Humaira	Demography –II Dr Afifa kalsoom (AP) Dr Imran Younas (AP)
Thursday (31-08-23)	PATHOLOGY (LGIS)	COMMUNITY MEDICINE (LGIS)
	Malignant diseases ofcervix .Cervical intraepithelial neoplasia Cervical carcinomas Dr Wafa Dr Mudassira	Demography-III Dr Afifa kalsoom (AP) Dr Imran Younas (AP)

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RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK
TENTATIVE TIME TABLE 4TH YEAR MBBS-POPULATION MEDICINE & REPRODUCTION MODULE 2023 (SEVENTH WEEK)

DATE / DAY	8:00 AM – 9:00 AM	9:00 AM – 10:00 AM		10:30 AM – 12:00 PM	12:00 PM – 02:00 PM
Monday (04-09-23)	PATHOLOGY(CBL) Testicular atrophy Dr Syed Iqbal Haider Dr Syeda Aisha Dr Unaiza Dr Faiza	PHARMACOLOGY (LGIS) Oxytocic drugs & Uterine Relaxants DR Asma DR Attiya		CLINICAL CLERKSHIP	
Tuesday (05-09-23)	PATHOLOGY (CBL) Pathology of vulva and vagina Dr Abid Dr Saeed Dr Nida Dr Mahjabeen	OBS (LGIS) Induced/septic abortions Gynae Unit II Dr Talat Dr Aqsa			
Wednesday (06-09-23)	PHARMACOLOGY (CBL) Oxytocic and Uterine relaxant DR Arsheen DR Tahira DR Rubina	COMMUNITY MEDICINE (LGIS) Health economics framework and structure & evaluation Dr Sana (Assoc) Dr Imrana younas			
Thursday (07-09-23)	REPRODUCTION ETHICS (CBL)	COMMUNITY MEDICINE(LGIS) Global Public Health- WHO,NGOs Dr Narjis Dr Asif			
	Butt		09:45am – 10:30am	10:30 -11:15 am	11:15am-12:00pm

Friday (08-09023)	COMMUNITY MEDICINE	PATHOLOGY (PRACTICAL)	Quran class	PATHOLOGY (SGD)	PATH OLOGY(SGD)			
Saturday 09-09-2023	REVISION	Benign and pre malignant disease of Uterus Dr Mahjabeen		GTD, Choriocarcinoma Dr Fariha Dr Fatima Dr Amna Dr Sarah	Dysfunctional uterine bleeding Dr Fatima Dr Tayyaba Dr Rabiyya Dr Mehreen			
	ODD	EVEN						
	08:00am - 09:45am		09:45am – 10:30am	10:30-11:15AM	Break 11:15sm-11:45am	11:45am-12:30pm	12:30-1:15 pm	1:15-2:00 pm
	COMMUNITY MEDICINE	PATHOLOGY (PRACTICAL)	PATHOLOGY (SGD)	PHARMACOLOGY (LGIS)		PATHOLOGY (SGD)	MEDICINE (LGIS)	OBS (SGD)
	REVISION	Benign and premalignant disease of Uterus Dr Mahjabeen	Benign and premalignant disease of cervix Dr Tayyaba Dr Fariha Dr Syeda Fatima Dr Sarah	Drugs used in treatment of infertility DR Asma DR Haseeba		BPH, Prostatic cancer,testicular atrophy Dr Mudassira Dr Fatima Dr Tayyabba Dr Rabbiya		Patogram, CTG Gynae unit II Dr Khansa Dr Farah
	EVEN	ODD						
	END MODULE ASSESSMENT 11 TH SEPTEMBER 2023							

Teaching Staff / Human Resource of Department of OBS/ GYNAE

Sr. #	Designation Of Teaching Staff / Human Resource	Total number of teaching staff
1.	Professor	01
2.	Associate professors	02
3.	Assistant professors	03
4.	Senior Registrars	02

Teaching Staff / Human Resource of Department of Community Medicine

Sr.no.	Designation	Total number of teaching staff
1	Professor	01
2	Associate professor	03
3	Assistant professor	02
4	Demonstrators	05
5	PGTs	04

Teaching Staff / Human Resource Distribution of Department of Pathology in Block-IV

Sr.no.	Designation	Total number of teaching staff
1	Professor	03
2	Associate professor	01
3	Assistant professor	03
4	Dmonstrators	12

**TABLE OF SPECIFICATION TEACHING
HOURS:134**

Subjects	Teaching hours LGIS/SGD	Weight age	MCQs (01 mark each)	SEQs (05 marks each)
Community Medicine	32.75	24.45 %	15	02
Pathology	28	20.89 %	25	05
Pharmacology	18.25	13.61 %	10	05
Obs / Gynae	35.25	26.35 %	30	02
Pediatrics	05.75	4.29 %	10	01
Medicine	07	5.22 %	05	01
Surgery	1.75	1.30 %	05	01
Total	134	100	100	85

Research

Cultivating the culture of Research has always been envisioned as one of the main pillars of Rawalpindi Medical University, as a means to develop healthcare professionals capable of contributing to the development of their country and the world. For the purpose thereof, right from the inception of Rawalpindi Medical University, efforts were concentrated to establish a comprehensive framework for research in Rawalpindi Medical University, as a matter of prime importance. With team efforts of specialists in the field of research, framework was made during the first year of the RMU, for the development and promotion of Research activities in RMU, called the Research Model of RMU, giving clear scheme and plan for establishment of required components for not only promoting, facilitating and monitoring the research activities but also to promote entrepreneurship through research for future development of RMU itself.



Biomedical Ethics

Ethical choices, both minor and major, confront us everyday in the provision of health care for persons with diverse values living in a pluralistic and multicultural society.

Four commonly accepted principles of health care ethics, excerpted from Beauchamp and Childress (2008), include the:

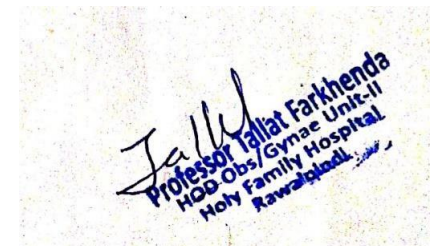
1. Principle of respect for autonomy,
2. Principle of nonmaleficence,
3. Principle of beneficence, and
4. Principle of justice.

Family Medicine

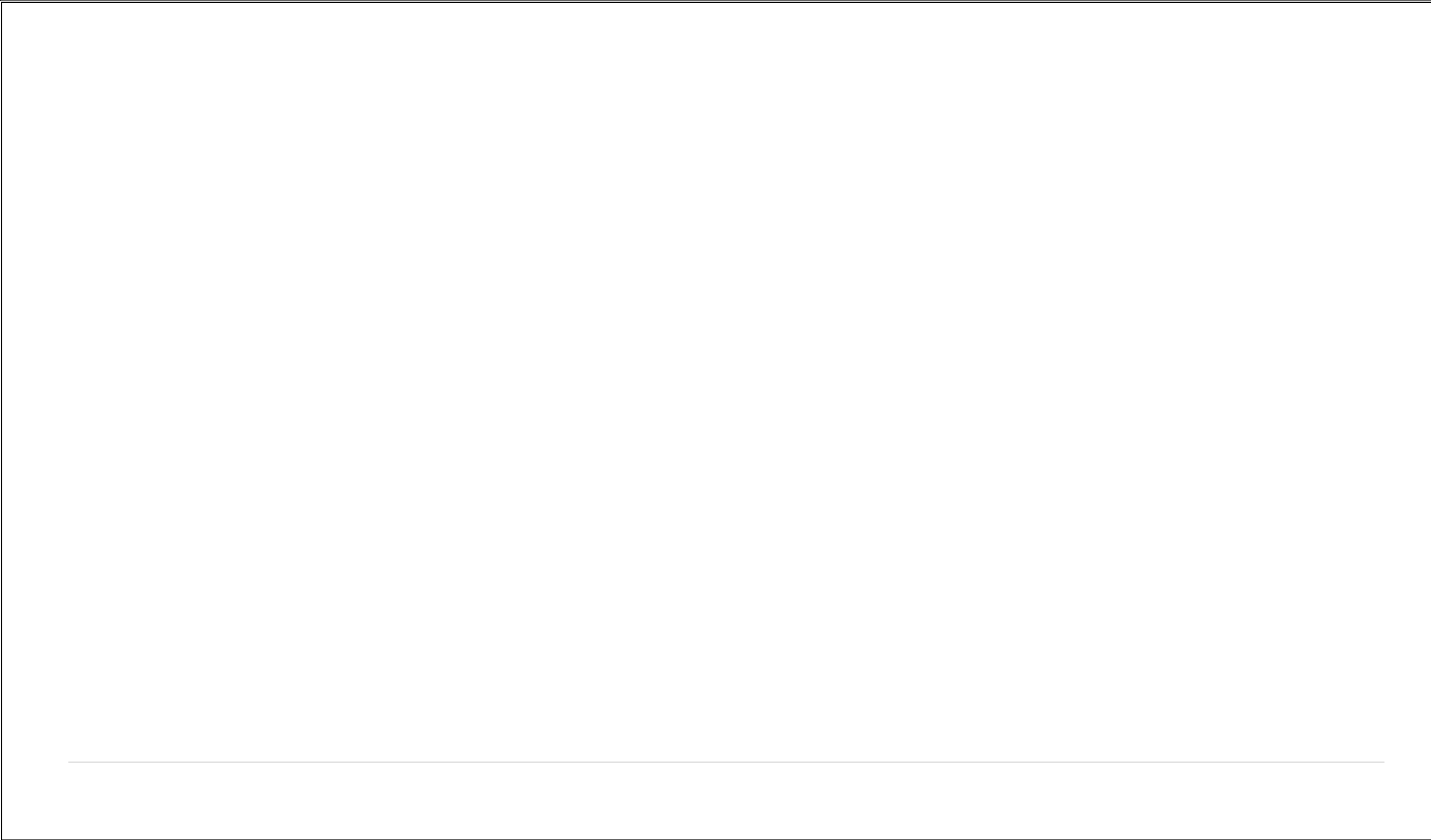
Family Medicine is the primary care medical specialty concerned with provision of comprehensive health care to the individual and the family regardless of sex, age or type of problem. It is the specialty of breadth that integrates the biological, clinical and behavioural sciences. Family physicians can themselves provide care for the majority of conditions encountered in the ambulatory setting and integrate all necessary health care services.

Artificial intelligence

Artificial intelligence in medicine is the use of machine learning models to search medical data and uncover insights to help improve health outcomes and patient experiences. Artificial intelligence (AI) is quickly becoming an integral part of modern healthcare. AI algorithms and other applications powered by AI are being used to support medical professionals in clinical settings and in ongoing research. Currently, the most common roles for AI in medical settings are clinical decision support and imaging analysis.









Study guide

Clinically Oriented Integrated Modular Curriculum

4th year MBBS

Renal Module-V



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1. Renal Module Team

Module Name: Renal Module

Duration of Module: 4 Weeks

Module Committee			Module Task Force Team		
1.	Vice Chancellor RMU	Prof. Dr. Muhammad Umar	1.	Coordinator	Dr. Sana Bilal Dr. Imrana Saeed
2.	Director DME	Prof. Dr. Rai Muhammad Asghar	2.	DME focal person	Dr Maryam Batool
3.	Convener Curriculum	Prof. Dr. Naeem Akhter			
4.	Dean Basic Sciences	Prof. Dr. Ayesha Yousaf			
5.	Additional Director DME	Prof. Dr. Ifra Saeed			
6.	Associate dean	Dr Asma Khan			
7.	Chairperson Community Medicine	Prof. Dr. Arshad Sabir	DME Implementation Team		
8.	Focal Person Pharmacology	Dr. Sobia Javed	1.	Director DME	Prof. Dr. Rai Muhammad Asghar
9.	Focal Person Community Medicine	Dr. Sana Bilal	2.	Add. Director DME	Prof. Dr. Asma Khan
10.	Focal person Pathology	Dr. Syeda Ayesha	3.	Assistant Director DME	Dr. Omaina Asif
			4.	Module planner & Implementation coordinator	Dr. Omaina Asif
			5.	Editor	Mr Ahmed Rafay, Dr. Omaina Asif

Module Preparation team

Professor Syed Arshad Sabir

HOD Community Medicine Department

Dr. Sana Bilal Associate professor

Coordinator

Dr Imrana Saeed

Co-Coordinator

2.University Motto, Vision, Values & Goals

Mission Statement

To impart evidence-based research-oriented health professional education in order to provide best possible patient care and inculcate the values of mutual respect, ethical practice of healthcare and social accountability.

Vision and Values

Highly recognized and accredited center of excellence in Medical Education, using evidence-based training techniques for development of highly Competent health professionals, who are lifelong experiential learner and are socially accountable.

3.Goals of the Undergraduate Integrated Modular Curriculum

The Undergraduate Integrated Learning Program is geared to provide you with quality medical education in an environment designed to:

- i. Provide thorough grounding in the basic theoretical concepts underpinning the practice of medicine.
- ii. Develop and polish the skills required for providing medical services at all levels of the Health care delivery system in future life.
- iii. Kindle a spirit of inquiry and acquisition of knowledge to help you attain personal and professional growth & excellence.

Introduction

Renal module provides integration of core concepts that underlie the foundation of basic sciences and their use in clinical medicine. This will eventually lead to developing critical thinking for integration and application of basic knowledge for clinical application.

Rationale: System based learning structure is adopted. The Endocrinology module is designed to impart basic knowledge. This knowledge will serve as a base on which the student will construct further knowledge about the etiology, pathogenesis, prevention of diseases and the principles of their therapeutics and management.

Module outcomes:

Knowledge

Each student will be able to acquire knowledge about the basic concepts of diseases in the community, use technology based medical education and to appreciate concepts & importance of

- Research
- Biomedical ethics
- Family medicine
- Artificial Intelligence

Skills

Interpret and analyze various practical & practices of clinical sciences.

Attitude

Demonstrate a professional attitude. Team building spirit and good communication skills.

This module will run in 4 weeks. The content covered will be made visible through introductory titles of the teaching sessions. Instructional strategies are given in the timetable and learning objectives are briefed in study guides. Study guides will also be available on university websites.

4. Terms & Abbreviations

Contents

- Domains of Learning
- Teaching and Learning Methodologies/Strategies
 - ✦ Large Group Interactive Session (LGIS)
 - ✦ Small Group Discussion (SGD)
 - ✦ Self-Directed Learning (SDL)
 - ✦ Case Based Learning (CBL)
 - ✦ Peer assisted learning (PAL)
 - ✦ Clinical / skill lab

Tables and figures

- ✦ Table1. Domains of learning according to Blooms Taxonomy
- ✦ Figure 1. Prof Umar's Model of Integrated Lecture
- ✦ Table 2. Standardization of teaching content in Small Group Discussions
- ✦ Table 3. Steps of taking Small Group Discussions

5. Domains Of Learning According To Blooms Taxonomy

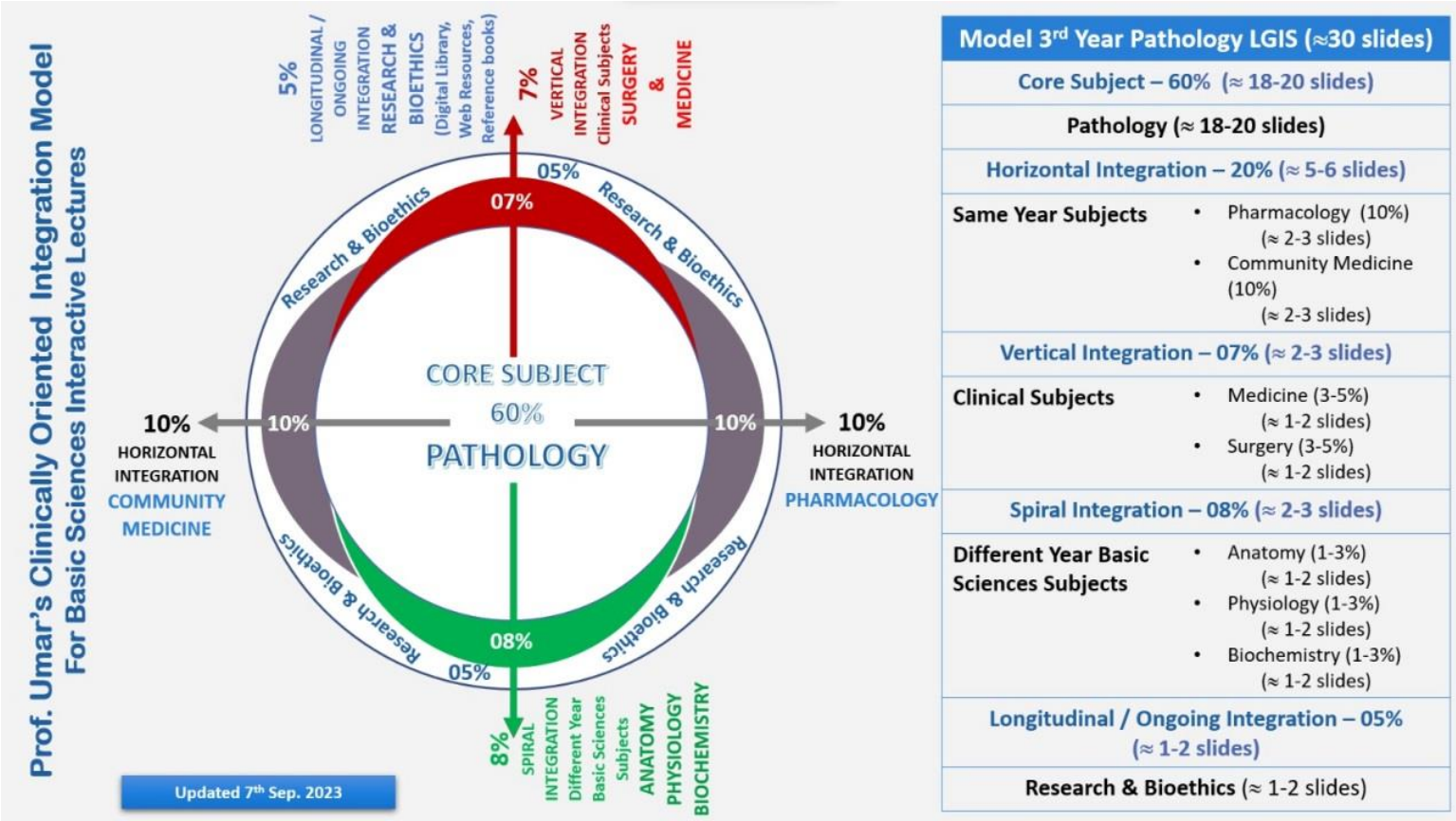
Sr. #	Abbreviation	Domains of learning
1.	C	Cognitive Domain: knowledge and mental skills.
	C1	Remembering
	C2	Understanding
	C3	Applying
	C4	Analyzing
	C5	Evaluating
	C6	Creating
2.	P	Psychomotor Domain: motor skills.
	P1	Imitation
	P2	Manipulation
	P3	Precision
	P4	Articulation
	P5	Naturalization
3.	A	Affective Domain: feelings, values, dispositions, attitudes, etc
	A1	Receive
	A2	Respond
	A3	Value
	A4	Organize
	A5	Internalize

6. Teaching and Learning Methodologies / Strategies

Large Group Interactive Session (LGIS)

The large group interactive session is structured format of Prof Umar Model of Integrated lecture. It will be followed for delivery of all LGIS. Lecturer will introduce a topic or common clinical condition and explains the underlying phenomena through questions, pictures, videos of patients, interviews and exercises, etc. Students are actively involved in the learning process.

Prof Umar Model Of Integrated Lecture



7. Small Group Discussion (SGD)

This format helps students to clarify concepts acquire skills and attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics or power point presentations. Students exchange opinions and apply knowledge gained from lectures, SGDs and self-study. The facilitator role is to ask probing questions, summarize and helps to clarify the concepts.

Standardization of teaching content in SGD`s

S.No	Topics	Approximate %
1	Title Of SGD	
2	Learning Objectives from Study Guides	
3	Horizontal Integration	5%+5% = 10%
4	Core Concepts of the Topic	70%
5	Vertical Integration	10%
6	Related Advance Research points	3%
7	Biomedical Ethical points	2%
8	Spiral integration	5%

Step 1	Sharing of Learning objectives by using students Study guides	First 5 minutes
Step 2	Asking students pre-planned questions from previous teaching session to develop co-relation (these questions will be standardized)	5minutes
Step 3	Students divided into groups of three and allocation of learning objectives	5minutes
Step 4	ACTIVITY: Students will discuss the learning objectives among themselves	15 minutes
Step 5	Each group of students will present its learning objectives	20 min
Step 6	Discussion of learning content in the main group	30min
Step 7	Clarification of concept by the facilitator by asking structured questions from learning content	15 min
Step 8	Questions on core concepts	
Step 9	Questions on horizontal integration	
Step 10	Questions on vertical integration	
Step 11	Questions on related research article	
Step 12	Questions on related ethics content	
Step 13	Students Assessment on online MS teams (5 MCQs)	5 min
Step 14	Summarization of main points by the facilitator	5 min
Step 15	Students feedback on the SGD and entry into log book	5 min
Step 16	Ending remarks	

8 .Self Directed Learning (SDL)

- Self- directed learning is a process where students take primary charge of planning, continuing, and evaluating their learning experiences.
- Home based / time assignment.
- Learning objectives are briefed in study guide
- Learning resources including pages, book names etc or link / web site
- Assessment: it will be online on LMS on a predefined schedule

Case Based Learning (CBL)

- It's a learner centered model which engages students in discussion of specific scenarios that resemble typically are real world examples.
- Case scenario will be given to the students
- Will engage students in discussion of specific scenarios that resemble or typically are real-world examples.

Learning Objectives, Teaching Strategies & Assessments

Learning objectives are given to the students and will be based on:

- Purpose to provide students with a relevant opportunity to see theory in practice • Require students to analyze data in order to reach a conclusion.
- Develop analytic, communicative and collaborative skills along with content

Contents of the Module

1. Horizontally Integrated Basic Sciences (Physiology, Pharmacology, Pathology, Community Medicine) 2. Large Group Interactive Session (LGIS):

- i. Pathology
- ii. Community Medicine
- iii. Pharmacology
- iv. Nephrology/Medicine
- v. Urology/Surgery
- vi. Pediatrics

3. Small Group Discussions (SGD)

- i. Pathology
- ii. Community Medicine
- iii. Pharmacology

4. Self-Directed Topic, Learning Objectives & References (SDL)

- i. Pathology
- ii. Community Medicine
- iii. Pharmacology

5. PAL

Community medicine

6. SKILL LAB

- i. Pathology
- ii. Pharmacology

7. CBL

- i. Pathology
- ii. Pharmacology
- iii. urology

8. Wards, operation theatres

- i. Surgery
- ii. Medicine

Horizontally Integrated Basic Sciences

S no	Subjects	Teaching hours without practical/PAL
1	Pathology (LGIS+SGD+CBL)	9
2	Community medicine (LGIS+SGD+BIOETHICS)	13
3	Pharmacology (LGIS+SGD+CBL)	6

9.Learning Objectives Of Pathology (LGIS)

TOPIC	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives After The Session Students Will Be Able To:	Learning domain	Teaching strategy	Assessment tool
Mechanism of glomerular injury, nephritic syndrome(post streptococcal glomerulonephritis)	<ul style="list-style-type: none"> Classification of glomerular diseases Introduction types ,causes &sign symptoms of glomerular diseases Pathophysiology & related Investigations of post streptococcal glomerulonephritis 	<p>The student should be able to</p> <ul style="list-style-type: none"> -Classify glomerular diseases. -Differentiate between nephrotic and nephritic syndrome -Describe the pathogenic mechanisms of diseases causing nephritic syndrome -Describe the morphological changes in post streptococcal glomerulonephritis 	<p>C3</p> <p>C3</p> <p>C2</p> <p>C2</p>	LGIS	MCQs, SEQs, OSPE Viva
Diseases causing nephritic syndrome Iga nephropathy ,hereditary nephritis,rpgn, crescentic gn,immune complex mediated gn	<ul style="list-style-type: none"> Introduction types ,causes &clinical features of Nephritic syndrome Glomerular injury mechaism Pathophysiology of nephritic syndrome Related morphology & investigations . 	<ul style="list-style-type: none"> -Describe the morphological changes in diseases causing nephritic syndrome -Describe the lab diagnosis of nephritic syndrome 	<p>C2</p> <p>C2</p>	LGIS	MCQs, SEQs, OSPE Viva
Pathologic basis of nephrotic syndrome Primary glomerular diseases	<ul style="list-style-type: none"> Classification of primary glomerular diseass Mechanism of diseases causing glomerular injury Related morphology & investigations 	<p>.</p> <p>Categorize glomerular diseases leading to nephrotic syndrome</p> <ul style="list-style-type: none"> -Describe the pathogenic mechanisms of diseases causing nephrotic syndrome -Describe the morphological changes in diseases causing nephrotic syndrome -Formulate the lab diagnosis of nephrotic syndrome 	<p>C3</p> <p>C2</p> <p>C2</p> <p>C3</p>	LGIS	MCQs, SEQs, OSPE Viva
Nephrotic syndrome in Systemic diseases Diabetes melitis Amyloidosis Sle Miscellaneous	<ul style="list-style-type: none"> Glomerular diseases leading to nephrotic syndrome Pathogenic mechanisms causing nephrotic syndromes Related investigations 	<ul style="list-style-type: none"> -Categorize systemic diseases leading to nephrotic syndrome -Describe the pathogenic mechanisms of systemic diseases causing nephrotic syndrome -Describe the morphological changes in systemic diseases causing nephrotic syndrome -Formulate the lab diagnosis of nephrotic syndrome 	<p>C3</p> <p>C2</p> <p>C2</p> <p>C3</p>	LGIS	MCQs, SEQs, OSPE Viva

Learning Objectives Of Community Medicine (LGIS)

TOPIC	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives After The Session Students Will Be Able To:	Learning domain	Assessment tool
Entomology Introduction & Classification of Arthropods of Public Health Importance	Medical Entomology; Transmission of arthropod borne diseases	<ul style="list-style-type: none"> Define Medical entomology. Define vector along with examples. Enlist and classify arthropods of medical importance. Identify, differentiate and explain features of various classes of arthropods. Explain with examples modes of transmission of arthropods borne diseases. Draw and explain life cycle of plasmodium along with various mosquito control measures Describe importance of entomology from public health aspect.	C1 C1 C2 C2	MCQ, SEQ
Transmission of Arthropod Infections Diseases transmitted by Arthropods integrated vector management	Medical Entomology. Principles Of Arthropods Control	<ul style="list-style-type: none"> Enlist diseases caused by house fly. Describe life cycle of house fly and its habitat along with various methods to control fly. Identify and describe sand-fly, Tsetse fly, and black fly along with diseases caused by them. Describe integrated approach towards control of class insect.	C1 C2 C2	MCQ, SEQ
Vector Born Diseases-I Epidemiology of Viral Hemorrhagic fever & Malaria	Vector borne diseases; Epidemiological determinants	<ul style="list-style-type: none"> Define a vector and enlist various vector borne diseases. Explain modes of transmission and propagation of parasites. Define host and its types with examples. Enlist and explain mosquito borne diseases Explain life cycle of malarial parasites and integrated approach towards control of malaria. Name various causes of viral hemorrhagic fever along with their clinical features. Enlist causes of relapsing fever and various methods towards control of vector borne diseases.	C1&C2 C1&C2 C1, C2&C3 C1, C2	MCQ, SEQ
Vector Born Disease-II Prevention of Leishmaniasis & Scabies & Modes of Transmission of Filariasis	Vector borne diseases; Prevention & control	<ul style="list-style-type: none"> Define and explain filariasis and life cycle of filarial parasites, Describe modes of transmission of filariasis and assessment of various mosquito control programs. Explain Leishmaniasis, life cycle of sand-fly and integrated measures towards fly control. Explain scabies, its mode of spread along with curative and preventive measures.	C1 C1 C2	MCQ, SEQ
Snake Bite	Epidemiology Prevention of snakebite	<ul style="list-style-type: none"> Describe importance of snake bite, the epidemiology of snake bite Differentiate between clinical manifestations of different types of snakes, Enumerate ways of prevention from snakebite Management of snakebite, Enlist people more at risk	C1 C1	MCQ, SEQ
Disaster Management	Types of disaster Disaster management triage	<ul style="list-style-type: none"> Define disaster Differentiate between natural and man made disaster Classify different types of disaster Assess the magnitude of disaster Describe all the disaster management steps Understand triage and its importance in disaster management	C1&C2 C1&C2	MCQ, SEQ

Zoonotic diseases I	Introduction Viral Zoonotic Disease Rabies	<ul style="list-style-type: none"> Explain introduction of zoonosis, Discuss rabies disease, its origin and pathophysiology. Identify the preventive aspects of rabies. <p>Enlist vaccination schedule discussion in detail.</p>	C1 C2 C3 C1 C1 C2	MCQ, SEQ MCQ, SEQ
Viral & Bacterial Zoonotic Disease II	Chikungunya, Japanese encephalitis, bacterial zoonotic anthrax	<ul style="list-style-type: none"> Understand chikungunya, its pathophysiology. Discuss the preventive and health education aspects relevant to it. Explain Japanese encephalitis, clinical features and pathophysiology Strategize its prevention. Explain Anthrax and classify its types Identify clinical features, diagnose the disease Categorize the prevention under different levels of prevention 	C1 C2 C3 C1 C1 C2	MCQ, SEQ MCQ, SEQ
Zoonotic Disease III	Plague Brucellosis	<ul style="list-style-type: none"> Define plague, its history and epidemiology Demonstrate epidemiological triad of plague, types of plague with its prevention and treatment Define brucellosis Demonstrate epidemiological triad Concept of control in humans, prevention and treatment 	C1 C2 C3 C1 C1 C2	MCQ, SEQ MCQ, SEQ
Zoonotic Disease IV	Tetanus, Human Salmonellosis	<ul style="list-style-type: none"> Identify The causative agent, pathophysiology of tetanus, Enlist types of tetanus. Understand Vaccination schedule of tetanus. <p>Explain Preventive approach to be adopted in tetanus.</p> <ul style="list-style-type: none"> Define human salmonellosis', its epidemiology Demonstrate its epidemiological triad, with its types <p>Prevention and treatment of salmonellosis</p>	C1 C2 C2 C1 C2 C2	MCQ, SEQ MCQ, SEQ

Learning Objectives of Pharmacology (LGIS)

TOPIC	Contents Outlines (Major Topics & Sub-Topics)	Learning objectives At the end of session student will be able to	Learning domain	Assessment tool
Diuretics I	Carbonic Anhydrase inhibitors	<ul style="list-style-type: none"> Classify Diuretics Discuss the kinetics and Pharmacodynamics of Carbonic Anhydrase Inhibitors Rationale of uses of Carbonic Anhydrase Inhibitors in different clinical conditions <p>Discuss the Adverse Effects & drug interactions of Carbonic Anhydrase Inhibitors</p>	C1 C2	MCQ/SEQ
Diuretics II	Loop Diuretics	<ul style="list-style-type: none"> Discuss the kinetics and Pharmacodynamics of loop diuretics Rationale of uses of loop diuretics in different clinical conditions <p>Discuss the Adverse Effects & drug interactions of loop diuretics</p>	C1 C2 C1 C2	MCQ/SEQ
Diuretics III	Thiazide & Thiazide Like Diuretics	<ul style="list-style-type: none"> Discuss the kinetics and Pharmacodynamics of Thiazide & Thiazide like Diuretics Rationale of uses of Thiazide diuretics in different clinical conditions <p>Discuss the Adverse Effects & drug interactions of Thiazide diuretics</p>	C1 C2	MCQ/SEQ
Diuretics IV	Potassium Sparing Diuretics	<ul style="list-style-type: none"> Discuss the kinetics and Pharmacodynamics of Potassium Sparing Diuretics Rationale of uses of Potassium sparing diuretics in different clinical conditions <p>Discuss the Adverse Effects & drug interactions of Potassium Sparing diuretics</p>	C1 C2	MCQ/SEQ

Learning objectives of Family medicine LGIS

Major topic	Sub topics	LOS at the end of session students will be able to	COGNITIVE DOMAINS	MODE OF ASSESMENT
Urology and family medicine	Benign prostatic hyperplasia, Hematuria	<ul style="list-style-type: none"> Describe the clinical features, investigations and management of enlarged prostate in primary care settings 	C2	MCQS
		<ul style="list-style-type: none"> Explain the aetiology of painful and painless haematuria 	C2	
		<ul style="list-style-type: none"> Describe the red flags in patients with haematuria 	C2	

Learning objectives of Bioethics (community medicine) LGIS

Major Topic	SUB TOPICS	LOS at the end of session students will be able to	Cognitive Domains	Mode Of Assesment
Research ethics	Discussion will cover;		C2	MCQS
	<ul style="list-style-type: none"> Discuss different types of “Plagiarism” and 	<ul style="list-style-type: none"> Demonstrate understanding of different types of “Plagiarism” and “scientific misconduct” as ways of lying, stealing or Cheating related to research and publication 		
	<ul style="list-style-type: none"> Outline “scientific misconduct” related to research and publication 	<ul style="list-style-type: none"> Describe the concept of intellectual property” in reference to research ideas, medical writing, proposals, data, publication Identify issues related to authorship criteria for scientific journals 	C2	
	<ul style="list-style-type: none"> Elaborate the significance of intellectual property in relation to medical writing 	<ul style="list-style-type: none"> Describe the Authorship criteria according to ICMJE Guidelines 	C2	
	<ul style="list-style-type: none"> Intricate the issues related to authorship criteria 	<ul style="list-style-type: none"> Identify potential sources of unethical conduct in dissemination of research such as plagiarism, fabrication of data, duplicate publication and gift authorships. 		
	<ul style="list-style-type: none"> Discuss the ICJME Guidelines 			

Small Group Discussions Pathology (SGDs)

Topic	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives After The Session Students Will Be Able To:	Learning domain	Teaching strategy	Assessment tool
• Tubulointerstitial Diseases	Acute pyelonephritis causes ,morphology & related investigations Chronic pyelonephritis causes ,morphology & related investigations acute tubular injury/Necrosis causes ,morphology & related investigations	-Categorise Tubulointerstitial diseases on the basis of aetiology -Correlate the pathogenic mechanisms with morphological changes in acute tubular injury -Correlate the pathogenic mechanisms with morphological changes in tubulointerstitial nephritis -Describe the gross and microscopic changes of acute and chronic pyelonephritis.	C3 C3 C3	SGD	MCQs, SEQs, OSPE Viva
• Renal cystic diseases	Simple cyst morphology investigations Adult polycystic kidney disease Pathogenesis, morphology, clinical features & related investigations Autosomal Recessive polycystic kidney disease Pathogenesis, morphology, clinical features & related investigations Medullary disease with cyst Pathogenesis, morphology, clinical features & related investigations	Classify the common congenital and acquired cystic renal diseases. Correlate the etiology with pathogenesis of simple renal cysts. Correlate the morphological features with pathogenesis of ADPKD Correlate the morphological features with pathogenesis of ARPKD Correlate the pathogenesis with morphology of nephronophthisis	C3	SGD	MCQs, SEQs, OSPE Viva
• Renal tumors	Pathogenesis, morphology , clinical features & related investigations of Neoplasms of kidney	Classify renal tumors on the basis of morphology Correlate the pathogenesis with morphology of benign and malignant tumors Differentiate between the morphology of various renal tumors Enlist Important prognostic markers of Renal cancers	C3 C3 C3 C1	SGD	MCQ, SEQ, VIVA
• Renal vascular disease	Pathogenesis, morphology , clinical features & related investigations of renal vascular disease			SGD	MCQ,SEQ,VIVA

Small Group Discussion Pharmacology

Topic	Content	Domain	MoA
UTI	Causes , pathogenesis, morphology & related investigations	C2	MCQs

Case Based Learning Of Pharmacology (CBL)

TOPIC	Learning objectives At the end of sessions student will be able to:	Learning domain	Assessment tool
Role of diuretics in Pulmonary edema	<ul style="list-style-type: none">Clinical Pharmacology of diuretics	C3	MCQ

Self Directed Learning Pathology

topic	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives	Assessment tool	Learning resource
	<ul style="list-style-type: none"><u>Week 1:</u><ul style="list-style-type: none">Pathogenesis & morphology of primary Glomerular diseases.<u>Week 2:</u><ul style="list-style-type: none">Pathogenesis & morphology of secondary Glomerular diseases.<u>Week 3:</u><ul style="list-style-type: none">Diabetic Nephropathy<u>Week 4:</u><ul style="list-style-type: none">Causes of Heamaturia and related investigations	<ul style="list-style-type: none">The student should be able to:Describe the morphological features and pathogenesis of primary glomerular diseases<ul style="list-style-type: none">.Describe the morphological features and pathogenesis of secondary glomerular diseasesKnow causes , morphology & basic laboratory investigations of Diabetic NephropathyKnow causes and basic laboratory investigations Hematuria	MCQs	Robbins Basic pathology

Self Directed Learning Community Medicine

#	Major topic	Contents Outlines / Sub-Topics	Learning objectives. Students will be able to ...	Learning resource	Estimated study time	Assessment tool -MCQs (TOS)	Mode of assessment
1	Re-emerging health problems	Antimicrobial resistance – a major public health problem.	Students should be able to: <ul style="list-style-type: none"> Define Antimicrobial resistance. Causes of antimicrobial resistance Describe major examples of antimicrobial resistance and possible preventive measures. 	K Park Ed. 27 th (378-81)	4hrs	2-3MCQ	LMS-2
2	Hospital acquired infections	Hospital acquired infections / Nosocomial infections	Students should be able to: <ul style="list-style-type: none"> Define HAIs. infections and its types. Surveillance, Sources, & rout of speared of HAI. Explain standard precautions and other measures to prevent HAIs. 	1. K Park Ed. 27 th (359-61)	4hrs	2-3 MCQs	LMS-3

Self Directed Learning Phamacology

S. No.	Topic	Los At the end of session student will be able to:	Reference
1	Acetazolamide for the prevention of acute mountain sickness	<ul style="list-style-type: none"> Enlist the drugs used for acute mountain sickness <ul style="list-style-type: none"> Describe the mechanism of action of acetazolamide Discuss the role of acetazolamide for acute mountain sickness prevention 	Acetazolamide for the prevention of acute mountain sickness--a systematic review and meta-analysis https://pubmed.ncbi.nlm.nih.gov/22943270/
2	MANITOL USE FOR REDUCING CEREBRAL OEDEMA	<ul style="list-style-type: none"> Enlist the drugs used for reducing cerebral oedema Describe the mechanism of action of manitol Discuss the role of manitol in reducing cerebral oedema 	Cerebral Edema and its Management https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4923559/#:~:text=Mannitol%20is%20thought%20to%20decrease,altering%20red%20blood%20cell%20rheology.
3	Drugs used for treatment of UTI	<ul style="list-style-type: none"> Enlist the drugs used to treat UTI Describe mechanism of action of the drugs 	Management of uncomplicated urinary tract infections https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1071654/

Vertically Integrated Subjects

Learning Objectives Of Urology (LGIS)

S no	topic	Content outline & subtopics	Learning objectives with learning domain	Teaching strategy	Assessment strategy
1	Urinary Tract Congenital Anomalies	Upper urinary tract congenital anomalies, pathogenesis, diagnoses	<ul style="list-style-type: none"> Types of renal and ureteric anomalies C2 Discuss Incidence, presentation& impact on renal function C2 Explain Pathogeneses and clinical findings C3 Diagnose of upper urinary tract Anomalies C3 Management of various anomalies & complications C3 	LGIS	MCQS,SEQS
2	Congenital anomalies	Lower urinary tract congenital anomalies, pathogenesis, diagnoses	<ul style="list-style-type: none"> Describe the anomalies of urinary Bladder, Urethra& testis C2 Understand Clinical features, Presentation, Complications & treatment of various anomalies C3 	LGIS	MCQS,SEQS
3	Urinary stones upper tract	Theories, Factors & management of urinary stones	<ul style="list-style-type: none"> Describe the types of stones, various theories& factors C2 Understand the clinical presentation and Definitive management C3 	LGIS	MCQS,SEQS
4	Urinary stone disease lower tract	Theories, Factors & management of urinary stones	<ul style="list-style-type: none"> Understand the Role of metabolic and malnutrition in the formation of vesical calculi in children C2 Explain Clinical features & diagnosis C3 Discuss diagnosis & treatment of Urinary Tract Infection C3 	LGIS	MCQ, SEQS
5	Urinary tract trauma	Classification, etiology, management of trauma	<ul style="list-style-type: none"> Understand the etiology of Urinary tract trauma. C2 Classify Urinary tract traumas c2 Present & investigate the case C3 Management of Urinary tract trauma C3 	LGIS	MCQS ,SEQS
6	Urinary incontinence	Types, Causes& management of incontinence	<ul style="list-style-type: none"> Causes of urinary incontinence C2 Diagnose and identify different types incontinence C3 Manage urinary incontinence. C3 	LGIS	MCQS, SEQS

7	Benign Prostatic Hyperplasia (BPH)	Risk factors, signs symptoms	<ul style="list-style-type: none"> • Enlist the risk factors for BPH C2 • Enlist LUTS (Lower Urinary Tract Symptoms), Irritative& Obstructive Symptoms C3 • Understand IPSS (International Prostate Symptom Score) C3 • Investigations required for Diagnosis C3 • Discuss management on the basis of IPSS C3 • Explain the Indications and complications 	LGIS	MCQS, SEQS
8	Prostate cancers	Incidence & Risk Factor Investigations s, management of ca prostate	<ul style="list-style-type: none"> • Explain Incidence & Risk Factors C2 • Present Patient with Cancer Prostate C3 • Enlist Investigations Specially PSA, TRUS/ TRUS guided biopsy and Gleason score & sum C3 <p>Discuss management plan on the basis of history, Clinical findings & Histopathology C3</p>	LGIS	MCQS, SEQS
9	Renal cell carcinoma	Incidence & Risk Factor Investigations s, management of ca	<ul style="list-style-type: none"> • Classify Renal Tumors C2 • Enlist etiology & risk factors C2 • Enlist Clinical features of Renal Cell Carcinoma C2 • Discuss Investigations & Staging of Renal Cell Carcinoma C3 <p>Understand Management of Renal Cell Carcinoma</p>	LGIS/CBL	MCQS, SEQS
10	Bladder cancers	Incidence & Risk Factor Investigations s, management of ca urinary bladder	<ul style="list-style-type: none"> • Classify and enlist risk factors of bladder cancers C2 • Explain Clinical Presentation C3 • Enlist Investigations & grading of tumor C3 • Discuss Management options C3 	LGIS/CBL	MCQS, SEQS
11	Urinary Tract Infections	Incidence & Risk Factor Investigations s, management of UTI	<ul style="list-style-type: none"> • Define UTI C1 • Explain Common etiological agents & Risk factors of UTI • Discuss clinical features and complications c3 <p>Discuss treatment plan of management C3</p>	LGIS	MCQS, SEQS

Learning Objectives Of Nephrology (LGIS)

S no	Topic	Content outline & subtopics	Learning objectives with learning domain	Teaching strategy	Assessment strategy
1	Glomerulonephritis	pathological mechanism different types & treatment plan	<ul style="list-style-type: none"> Understand etiological agents/pathological mechanism behind Glomerulonephritis C2 Classify different types of Glomerulonephritis. C2 Individualize treatment plan according to types of GN. C3 Understand the role of renal biopsy in GN. C3 	LGIS	MCQS, SEQS
2	Nephrotic syndrome	Etiology, clinical features& management plan	<ul style="list-style-type: none"> Know etiology of nephrotic syndrome. C2 Describe clinical features of nephrotic syndrome C2 laboratory workup of nephrotic syndrome C3 Explain management plan of nephrotic syndrome.C3 	LGIS	MCQS, SEQS
3	Acute renal failure	clinical features Laboratory workup& management of AKD	<ul style="list-style-type: none"> Recall causes of acute renal failure.C2 Describe clinical features of acute and chronic renal failure C3 Enlist Laboratory workup & renal imaging in chronic kidney disease. C3 Explain Complications of CKD and management OF CKD (Both Pharmacological & Non-pharmacological). C3 	LGIS	MCQS, SEQS
4	Chronic renal failure	clinical features Laboratory workup& management of CKD	<ul style="list-style-type: none"> Recall causes of chronic renal failure. C2 Describe clinical features of acute and chronic renal failure C2 Enlist Laboratory workup & renal imaging in chronic kidney disease. C3 Explain Complications of CKD and management OF CKD (Both Pharmacological & Non-pharmacological). C3 	LGIS	MCQS, SEQS
5	Interstitial nephritis	clinical features& management plan of interstitial nephritis	<ul style="list-style-type: none"> Describe clinical presentation of patient with interstitial nephritis. C3 Enlist laboratory work up and imaging modalities used for diagnosis of interstitial nephritis C3 Explain management plan of interstitial nephritis. C3 Identify etiology of interstitial nephritis.C2 	LGIS	MCQS, SEQS

6	Urinary Tract Infection	clinical features& management plan of UTI	<ul style="list-style-type: none"> Know common microbes causing UTI, according to various age groups. C2 Identify symptoms and physical findings in UTI. C3 Differentiate between uncomplicated and complicated UTI. C2 Enlist laboratory workup required in UTI and describe pharmacological treatment plan. C3 	LGIS	MCQS, SEQS
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Learning Objectives Of Peadiatrics (LGIS)

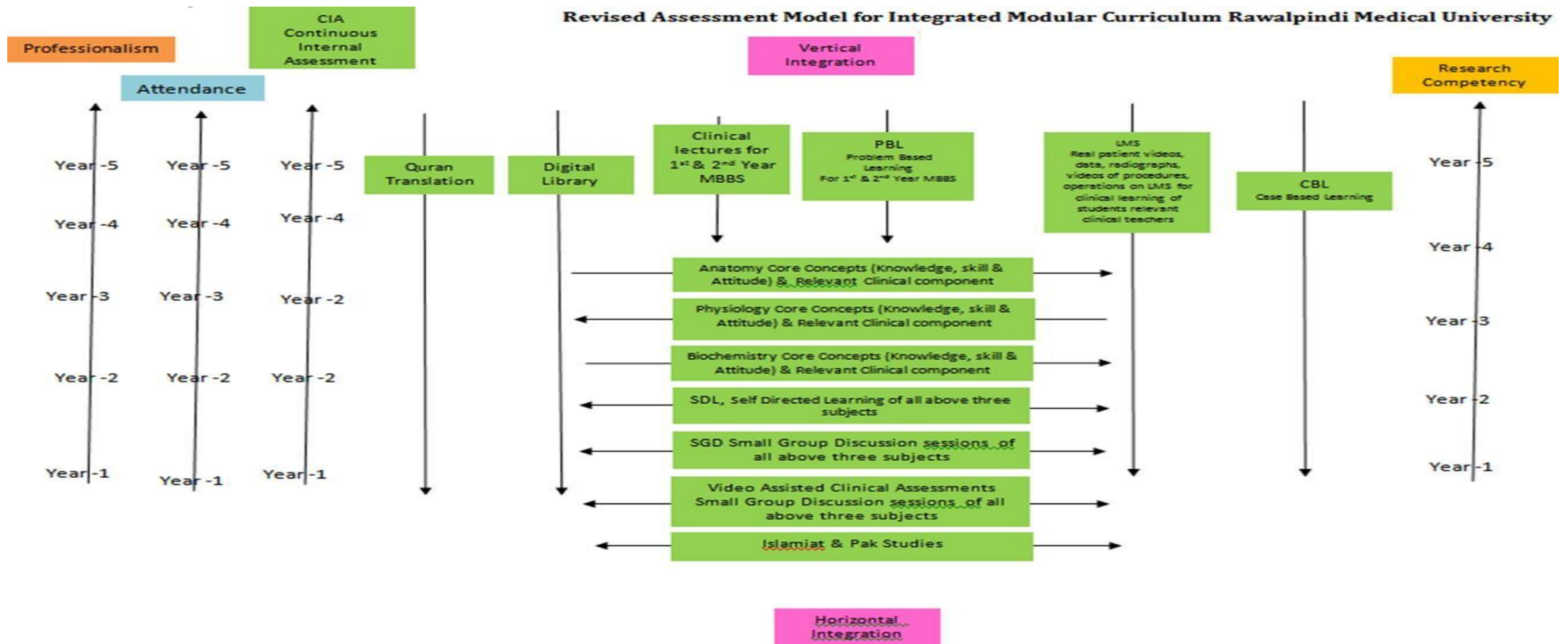
S no	topic	Content outline & subtopics	Learning objectives with learning domain	Teaching strategy	Assessment strategy
1	Nephrotic syndrome	clinical presentation investigations, complications & management plan of Nephrotic syndrome	<ul style="list-style-type: none"> Define Nephrotic Syndrome C2 Discuss clinical presentation C3 Differentiate minimal change disease from atypical nephrotic syndrome C2 Plan pertinent investigations, interpret and take appropriate action C3 Assess complications C3 Manage disease and its complications C3 	LGIS	MCQS, SEQS
2	Renal failure	clinical presentation investigations, complications & management plan of renal failure	<ul style="list-style-type: none"> Define Acute& chronic Renal Failure c2 Enlist common causes at different ages C2 Describe clinical presentation C3 Plan pertinent investigations, interpret and take appropriate action C3 Make differential diagnosis C3 Assess Complications C3 Manage disease and its complication C3 	LGIS	MCQS, SEQS

3	Urinary Tract Infections	clinical presentation investigations, complications & management of UTI	<ul style="list-style-type: none"> • Define UTI c1 • Explain Common etiological agent &Risk factors of UTI C2 • Discuss clinical features and complications C3 • Discuss treatment plan of management C3 • Define acute glomerular nephritis C3 • Discuss clinical presentation C3 • Make differential diagnosis C3 • Plan pertinent investigations, interpret and t • ake appropriate action C3 • Assess complications C3 • Make plan of Management C3 	LGIS	MCQS, SEQS
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10. Assessment Policies: (Contents)

- Assessment Plan
- Types of Assessment
- Modular Examinations
- Block examinations

Revised Assessment Model for Integrated Modular Curriculum Rawalpindi Medical University



Gauge for Continuous Internal Assessment (CIA)

Red Zone	High Alert	Yellow Zone	Green Zone	Excellent	Extra Ordinary
0 - 25%	26 - *50%	51 - 60%	61 - 70%	71 - 80%	81 - 100%

*50% and above is Passing Marks.

Gauge for attendance percentage

Red Zone	High Alert	Yellow Zone-1	Yellow Zone-2	Green Zone	Excellent
0 - 25%	26 - 50%	51 - 60%	61 - 74%	*75 - 80%	81 - 100%

*75% is eligibility criteria for appearing in professional examination.

11. Assessment Plan

University has followed the guidelines of Pakistan Medical and Dental Council for assessment. Assessment is conducted for SDL, SGD, mid modular, block/module levels.

Types of Assessment:

The assessment is formative and summative.

Formative Assessment: Formative assessment is taken from topics of SDL, SGD (MS TEAM).

Summative Assessment: Summative assessment is taken at the mid modular, modular/block levels.

Modular Examinations

Theory Paper:

There is a module examination at the end of first module. The content of the whole teaching of the module are tested in this examination.

It consists of paper with objective type questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module. (Annexure I attached)

Viva Voce:

Structured table viva voce is conducted including the practical content of the module.

Block Examination

On completion of a block which consists of two modules, there is a block examination which consists of one theory paper and OSPE.

Theory Paper

There is one written paper for each subject. The paper consists of objective type questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module.

Block OSPE

This covers the practical content of whole block.

Types of Assessment:

1. Formative
2. summative

Formative Assessment

Formative assessment will be done at the mid of module of SDL and SGD through LMS at mid of 2nd week. Assessment of clinical lectures on LMS. Tool for this assessment will be one best choice question.

Summative Assessment:

Summative assessment will be taken at the end of module, block and will be subject wise

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Venue	Frequency
1.	MCQ based Test	formative	Weekly SDL test	LMS / MS team	01 x no. of weeks
2.	One best option MCQs test	formative	Mid module during 2 nd week	LMS	01
3.	Theory (MCQ+SEQ) and Viva Exam	Summative	End of module exam	On campus test	01
4.	End of clerkship Exam (OSCE, MCQs, OSPE)	Summative	(OSCE, MCQs, OSPE)	On campus	01

Assessment Frequency & Time In Renal Module

Types Of Community Medicine Assessment

Block		Renal module	Type of Assessments	Total Assessments Time		No. of Assessments	
Renal module	Sr #	Types of Assessments	Nature of assessment	Assessment Time	Summative Assessment Time	Formative Assessment Time	
	1	Mid Module Examinations (pathology 5 MCQS, Community Medicine 5MCQS, pharmacology5 MCQS) vertically integrated subjects 5 MCQS (20 MCQs) 20 marks	Formative	20 Minutes	230 minutes (4 hour)	30 Minutes	2-3 Formative
	2	SD Examinations (2-3) on LMS (10 MCQs) each exam 10 marks	Formative	60 Minutes			
	3	End Module Examinations	Summative	Detailed below			
	Breakup of EOM Assessment						
		i. Community medicine (4 SEQs and 20 MCQs) 40 marks	Summative	60 Minutes			
		ii. Pathology (4 SEQ&26MCQs) 46 marks		60min			
		iii. pharmacology (6 seq 10 MCQs) 40 marks	Summative	60 Minutes			
	4	iv. Ward test at the end of two weeks rotation in clinical subjects & End of clerkship C med (OSPE) 40 marks	Summative	40-60 minutes			2 Summative

Types Of Assessment Pharmacology Department

S. No	Mode Of Assessment	Type Of Assessment	Schedule Of Assessment	Venue	Frequency
1.	MCQ	formative	Weekly SDL test	LMS	01x no.of weeks
2.	One best option MCQs test	formative	Mid module during 2 nd week	LMS	
3.	Theory (MCQ+SEQ)	Summative	End of module exam	On campus test	01
	Practical (VIVA)				

Types Of Assessment Pathology Department

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Venue	Remarks
1	MCQ	Formative	Weekly SDL test	LMS	1per wk
2	One best option MCQs test	formative	Mid module during 2nd week	LMS	01
3	MCQ, SEQs, based examination OSPE Viva Exam	summative	End of module /block exam “	On campus test	01

Table Of Specification (TOS)

Renal Mid Module Assessment

Sr. #	Discipline	No. of MCQs	No. of MCQs according to cognitive domain		
			C1	C2	C3
1.	Pathology	5	01	03	01
2.	Community Medicine	5	01	03	01
3.	Pharmacology	5	01	03	01
4.	Vertically integrated subjects	5	01	03	01
	Total	20			

Renal End of Module Assessment

Fourth Year MBBS 2023

Sr. #	Major subjects of the module to be assessed	No. of MCQs ff each subject	No. of MCQs according to cognitive domain			No. of SAQs (%)		No. of SAQs according to cognitive domain			viva	Total Marks
			C1	C2	C3	No. of items	Marks	C1	C2	C3		
1.	Pathology	25	05	10	10	05	25	1	2	2	20	70
2.	pharmacology	10	03	03	04	06	30	2	2	2	10	50
3.	Community Medicine	20	05	06	09	04	20	1	2	1	20	60
	Total MCQs Marks	55					75				60	
Grand Total											180	

12. Timetable

Staff / Human Resource Distribution of Department of Pathology in Block-III

Sr.no.	Designation	Total number of teaching staff
1	Professor	02
2	Associate professor	02
3	Assistant professor	04
4	Demonstrators	12

Detail of Contact hours (faculty) & contact hours (students)

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty)	Total Hours (Students)	Faculty level
1	LGIS (4). 1hrs each session (half class sessions)	2 x 4= 8 hrs.	4	Professor, associate, and assistant professors
2	SGD/CBL (4) approx. 1hrs each session. 1/4 th class	4x1 x 4= 16hrs.	4	Assistant professors
3	Skill lab(3) approx. 2hrs per session.	3 x 2 = 6hrs.	1	Demos (subject specialists) supervised by professional faculties
4	SDL (2)	1 x 2 = 2 hrs.	2	Demos (subject specialists)
		Total: 32 hrs	11 hrs	

Categorization Of Modular Content Of Pathology Department

Category A*	Category B**	Category C***		
LGIS	LGIS	SGDS	SDL	CBL
Mechanism Of Glomerular Injury, Nephritic Syndrome(Post Streptococcal Glomerulonephritis)	Nephrotic syndrome in Systemic diseases Diabetes melitis Amyloidosis Sle Miscellaneous	Renal vascular diseases	Pathogenesis & morphology of primary Glomerular diseases	Urinary tract infections
Diseases Causing Nephritic Syndrome Iga Nephropathy ,Hereditary Nephritis,Rpgn, Crescentic Gn,Immune Complex Mediated Gn		Tubulointerstitial diseases	<ul style="list-style-type: none">. Pathogenesis & morphology of secondary Glomerular diseases	
Pathologic Basis Of Nephrotic Syndrome Primary Glomerular Diseases		Renal cystic diseases	Diabetic Nephropathy	
		Renal tumors	Causes of Heamaturia and related investigations	

Category A*: Fundamental & Complex Concepts taken by Professors, Associate Professors and Assistant Professors

Category B**: Intermediate concepts. Exercises. By Professorial faculty and Senior Demonstrators/ subject specialists.

Category C***: Relatively lower complex concepts, exercises/ applications. By Assistant professors, Demonstrators

Ranking Of Content Of Community Medicine

Category A*	Category B**	Category C***		
LGIS	LGIS	SDGS	SDL	IUGRC SESSIONS (PAL)
Entomology Introduction & Classification of Arthropods of Public Health Importance	Viral Zoonotic Disease Bacterial Zoonotic Disease	Parasitic Disease Introduction and Classification of Parasites Helminthology I	Antimicrobial resistance – a major public health problem.	Selection of research title (Finer Criteria) & literature review
Vector Born Diseases-I Epidemiology of Viral Hemorrhagic fever & Malaria, Vector Born Disease-II Bioethics	Rickettsial Zoonotic Disease Parasitic Zoonotic Diseases	Parasitic Disease important Parasitic infections Helminthology II	Hospital acquired infections / Nosocomial infections	
Disaster management, snake bite				

Category A*: Fundamental & Complex Concepts taken by Professors, Associate Professors and Assistant Professors Category B**:

Intermediate concepts. Exercises. By Professorial faculty and Senior Demonstrators/ subject specialists.

Category C***: Relatively lower complex concepts, exercises/ applications. By Assistant professors, Demonstrators & senior PGTs)

Staff / Human Resource of Department of Community Medicine

Sr.no.	Designation	Total number of teaching staff
1	Professor	01
2	Associate professor	02
3	Assistant professor	04
4	demonstrators	05
5	PGTs	05

Contact Hours (Faculty & Students)

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty)	Total Hours (Students)	Faculty level
1	LGIS (6). 1hrs each session (half class sessions)	2 x 8= 16 hrs.	6	Professor, associate, and assistant professors
2	SGD (1) approx. 2hrs each session. 1/4class	1 x 4= 4 hrs.	4	Demos (subject specialists), Senior PGTs
3	PAL (IUGRC) (2) approx. 2hrs per session. (16 small groups. 8 groups per day)	2 x 2 =4 hrs.	2	Demos (subject specialists) supervised by senior faculties
4	SDL (3)	1 x 1 =3 hrs.	3	Demos (subject specialists)
		Total: 27 hrs	15hrs	

Timetable 4th Year MBBS-Renal Module 2023

Saturday 16.9.23	08:00AM – 09:00AM		09:00AM – 10:00		10:00AM – 11:00AM		BREAK 11:00AM – 11:45AM	11:45AM – 12:30PM		12:30PM – 01:15PM		01:15PM – 02:00PM	
	Pharmacology (LGIS)		Community Medicine (LGIS)		Community Medicine (LGIS)			Pharmacology(CBL)		Pathology- CBL		Community Medicine (LGIS)	
	DIURATICS I carbonic Anhydrase inhibitors		Medical Entomology I Transmission of Arthropods		BIOETHICS Ethics in research			Role of diuretics in pulmonary edema		UTI		Genetics	
	Odd CPC hall	Even lec hall 3	Odd CPC hall	Even Lec hall 3	Even hall 4	Odd hall 5		Hall 3, 4	Odd hall 5,6/forensic lab	Even hall 3,4	Hall 5,6 /forensic lab	Even hall 4	Hall 5 odd
	Dr Asma khan (assoc professor)	Dr Atiya Munir (assist professor	Dr Afifa Kalsoom (A, Professor)	Dr Asif (S Demo)	Prof Syed Arshad Sabir	Dr Khola Noreen		Dr Tahira,Dr Zaheer	Dr Uzma,Dr Robina	Dr Iqbal, Dr Sayyeda Aysha	Dr Unaiza, Dr Faiza	Dr Narjis	Dr Abdul Qudoos

Tentative Timetable 4TH Year MBBS-Renal Module 2023 First week (W.E.F 18.9.23-23.9.23.)

	8:00 AM – 9:00 AM		09:00am – 10:00am		10:30am – 12:00pm		12:00pm - 02:00pm														
Monday 18.9.23	Anatomy (LGIS)		Community medicine (LGIS)		CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.																
	Review Of Basic Anatomy Of Renal System (Revisit Lecture)		Disaster management																		
	Odd/ Lec hall 1 Even		Even/lec hall 2	Odd/lec hall 1																	
	Dr. (Professor)		Dr Sana Bilal (Assc Prof)	Dr Rizwana Shahid (A P)																	
Tuesday 19.9.23	Pathology (LGIS 1)		Bioethics (LGIS)																		
	Mechanism Of Glomerular Injury, Nephritic Syndrome		Duties of ERB																		
	Even/lec hall 2	Odd/ Lec hall 1	Even/lec hall 2	Odd /Lec hall 1																	
	Dr Mobeena (Prof)	Dr Wafa (Prof)	Dr Arshd sabir (prof)	Dr khola Noreen (Assoc. prof)																	
Wednesday 20.9.23	Urology (LGIS)		Community Medicine (LGIS)																		
	Upper Urinary Tract Congenital Anomalies		Medical Entomology II Transmission Of Arthropods																		
	Even/lec hall 2	Odd/ Lec hall 1	Even/lec hall 2	Odd/ Lec hall 1																	
	Dr. Zein El Amir (Professor)	Dr M. Amin (sr. registrar)	Dr Afifa Kalsoom (A, Professor)	Dr Asif (S Demo)																	
Thursday 21.9.22	Pathology(LGIS)		Community Medicine (LGIS)																		
	Diseases Causing Nephritic Syndrome		Handicap																		
	Even/lec hall 2	Odd/ Lec hall 1	Even/lec hall 2	Odd/ Lec hall 1																	
	Dr Tayyaba (A Prof)	Dr Mudassara (A Prof)	Dr Abdul Qudoos (S demo)	Dr Asif (S Demo)																	
Friday 22.9.23	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		11:15AM – 12:00PM														
	IUGRC / Skill lab		Urology (LGIS)		Nephrology (LGIS)		Pathology(LGIS 3)														
	Community Medicine / Pathology IUGRC VIVA/Parasitic disease/ Chronic Pyelonephritis		Lower Urinary Tract Congenital Anomalies		Glomerulonephritis		Pathologic Basis Of Nephrotic Syndrome (Primary Glomerular Diseases)														
	Batch A-H	Batch I-P	Even hall 4	Odd hall 5	Even /lec hall 5	Odd lec hall 4	Even/lec hall 5	Odd/lec hall4													
	All demonstrators will take their respective research batches	Dr Fatima Rizvi (Demonstrator)	Dr. Zein El Amir (Professor)	Dr M. Amin (sr. registrar)	Dr saima mir(DHQ)	Dr Asif (asst Prof,HFH)	Dr Fatima Rizvi (Assoc Prof)	Dr Fatima Tu Zahra													
Saturday SEMINAR NEPHROTIC SYNDROME 23.9.23	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		BREAK 11:15AM – 11:45AM	11:45AM – 12:30PM		12:30PM – 01:15PM		01:15PM – 02:00PM									
	IUGRC / skill lab		Islamic Studies (LGIS)		Nephrology (LGIS)			Pathology (LGIS 4)		Paediatrics (LGIS)		Urology (LGIS)									
	Community Medicine / Pathology							Nephrotic Syndrome In Systemic Diseases		Nephrotic Syndrome		Upper Urinary Tract Stone Diseases									
	IUGRC VIVA/Parasitic disease/ Chronic Pyelonephritis							Even/lec hall 5		Odd/lec hall 4		Even/lec hall 5		Odd/ lec hall 4							
	Batch I-P	Batch A-H	Even,Odd/ Lec hall 1		ODD hall 4			Even hall 5		Dr Fareeha sardar		Dr Rubina		Dr Mamoon.SR. BBH		Dr Moneeba (SR,BBH)		Dr M. Amin(sr. registrar)		Dr M. Ali (sr. registrar)	
	All demonstrators will take their respective research batches	Dr Abid (Sr Demonstrator)		Mufti Wahid sb		Dr Saima Mir (DHQ)		Dr Asif (Asst Prof,HFH)													

Tentative Time table 4TH Year MBBS-Renal Module 2023 (W.E.F 25.9.23-30.9.23) (2nd WEEK)

DATE / DAY		8:00 AM – 9:00 AM		09:00am – 10:00am		10:30am – 12:00pm				12:00pm - 02:00pm			
Monday 25.9.23	Community Medicine		Pharmacology (LGIS)		BREAK 10:00AM – 10:30AM	CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.							
	Vector Born Diseases Epidemiological Determinants		Diuretics II loop diuretics										
	Odd /Lec hall 1	Even Even/lec hall 2	Even Even/lec hall 2	Even/lec hall 2									
	Dr Imran Younis (A, Professor)	Dr Asma khan (assoc professor)	Dr Asma khan (assoc professor)	Dr Maimoona (S Demo)									
Tuesday 26.9.23	Pharmacology (LGIS)		Community Medicine (LGIS)										
	Diuretics III Thiazide Diuretics		Vector Born Diseases Prevention & Control										
	Even Even/lec hall 2	Odd /Lec hall 1	Even/lec hall 2	Odd /Lec hall 1									
	Dr Asma khan (assoc professor)	Dr AtiyaMunir (assist professor)	Dr Imran Younis (A, Professor)	Dr Maimoona (S Demo)									
Wednesday 27.9.23	Urology (CBL)		Community Medicine (LGIS)										
	Trauma Urinary Tract.		Snake Bite Prevention										
	Odd /Lec hall 1	Even/lec hall 2	Even/lec hall 2	Odd /Lec hall 1									
	Dr Zeeshan (asst prof)	Dr Sadaat hashmi (sr. registrar)	Dr Rizwana shahid (AP)	Dr Sana bilal (Assos Professor)									
Thursday 28.9.23	Urology (LGIS)		Family Medicine (LGIS)										
	Lower Urinary Tract Stone Diseases		Red Flags Of BPH& Heamaturia										
	Odd /Lec hall 1	Even/lec hall 2	Even/Odd /Lec hall 1										
	DR. Zeeshan Qadeer (Ass. Professor)	Dr.Ali (sr. registrar)	Dr Saadia HOD Family Medicine Deptt										
Friday 29.9.23	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		11:15AM – 12:00PM						
	Pal / Skill Lab		Islamic Studies (LGIS)		Nephrology (LGIS)		Pathology (SGD 1)						
	Community Medicine / Pathology IUGRC presentations/(Wilms Tumor)				Acute Renal Failure		Renal Vascular Diseases						
	Batch A-H	Batch I-P	Odd /Lec hall 1 Even		Even	Odd	Even	Odd					
	Faculty of C med	Dr Mehreen (demonstrator)	Mufti Wahid sb		Dr Mudassar Murtza (BBH)	Dr Asif (asst Prof,HFH)	Dr Mudassra,Dr Amina Noor	Dr Rabiyya, Dr Fatim Tuz Zahra					
Saturday SEMINAR RENAL FAILURE 30.9.23	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		BREAK 11:15AM – 11:45AM	11:45AM – 12:30PM		12:30PM – 01:15PM		01:15PM – 02:00PM	
	Pal / Skill Lab		Pathology (SGD 2)		Nephrology (LGIS)			Pharmacology(LGIS)		Paediatrics (LGIS)		Urology (LGIS)	
	Community Medicine / Pathology IUGRC presentations/Wilms Tumor		Tubulointerstitial Diseases		Chronic Renal Failure			Diuretics IV Potassium Sparing		Renal Failure		Urinary Incontinence.	
	Batch I-P	Batch A-H	Hall 3,4	Hall 5,6	Even hall 4	Even hall 5		Even hall 4	Odd hall 5	Even hall 4	Odd hall5	Even hall 4	Odd hall5
	Faculty of C med	Dr Iqbal Haider, (Sr Demonstrator)	Dr Fariha,Dr Fatima Rizvi	Dr Tayyaba, Dr Sara Rafi	Dr Saima Mir (DHQ)	Dr Asif (Asst Prof)		Dr.Asma khan(assoc prof)	Dr.Attiya Munir (asst prof)	Dr Nosheen Riaz.SR HFH	Dr Sonia FazalSR. HFH	Dr M. Amin(sr. registrar)	Dr M. Ali (sr. registrar)

Tentative Timetable 4TH Year MBBS-Renal Module 2023 (W.E.F 2.10.23-7.10.23) (3rd Week)

DATE / DAY		8:00 AM – 9:00 AM		09:00am – 10:00am		10:30am – 12:00pm				12:00pm - 02:00pm				
Monday 2.10.23	UROLOGY (CBL)		Community Medicine (Lgis)				CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.							
	Benign Prostatic Hyperplasia.		Zoonotic Diseases I Classification, Epidemiology Of Viral Zoonotic Diseases Rabies											
	Odd /Lec hall 1	Even/lec hall 2	Odd /Lec hall 1	Even/lec hall 2										
	Dr. Zeeshan (asst Professor)	Dr. Faraz (sr. registrar)	Dr Abdul Qudoos (Sr. Demonstrator)	Dr Imrana Saeed (Sr. demonstrator)										
Tuesday 3.10.23	Urology (LGIS)		Community Medicine (LGIS)											
	Carcinoma Prostate		Epidemiology Of Viral Zoonotic Diseases, Chikungunya, Japanese Encephalitis											
	Even/lec hall 2	Odd /Lec hall 1	Even/lec hall 2	Odd /Lec hall 1										
	Dr. Zein El Amir (Professor)	Dr Faraz (sr. registrar)	Dr Abdul Qodoos (Sr. Demonstrator))	Dr Imrana Saeed (Sr. demonstrator)										
Wednesday 4.10.23	Urology (LGIS)		Community Medicine (LGIS)											
	Renal Cell Carcinoma.		Epidemiology Of Bacterial Zoonotic Plague ,Brucellosis											
	Even/lec hall 2	Odd /Lec hall 1	Even/lec hall 2	Odd /Lec hall 1										
	Dr Zain ul Amir (prof)	Dr M. Ali (sr. registrar)	Dr Abdul Qodoos (Sr. Demonstrator)	Dr Gulmehar (AP)										
Thursday 5.10.23	Urology (LGIS)		Community Medicine (LGIS)											
	Bladder Tumors.		Epidemiology Of Bacterial Zoonotic Tetanus, Anthrax											
	Even/lec hall 2	Odd /Lec hall 1	Even/lec hall 2	Odd /Lec hall 1										
	Dr. Zeeshan Qadeer AP	Dr Rameez Ahmed (sr. registrar)	Dr Abdul Qodoos (Sr. Demonstrator))	Dr Gulmehar (AP)										
Friday 6.10.23	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		11:15AM – 12:00PM							
	Community Medicine / Pathology SGD / skill lab		Pathology (SGD3)		Nephrology (LGIS)		Pathology							
	Epidemiology of parasitic disease/ Renal Cell And Transitional Cell Carcinoma		Renal Tumor		Renal Tumors		Revision class/SDL							
	Batch A-H	Even hall 4	Even hall 4	Even hall 5,6/forensic lab	Even hall 4	Odd hall 5	Even hall 4	Odd hall 5						
	Dr Aysha /Dr Zaira Pgt	Dr Mudassra,Dr Amina Noor	Dr Mudassra,Dr Amina Noor	Dr Uzma,Dr Robina	Dr Saima Mir (DHQ)	Dr Mudassar Murtza(BBH)	Dr Mudassra	Dr Fatim Tuz Zahra						
Saturday SEMINAR URINARY TRACT INFECTIONS 7.10.23	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		BREAK 11:15AM – 11:45AM	11:45AM – 12:30PM		12:30PM – 01:15PM		01:15PM – 02:00PM		
	SGD / skill lab Community Medicine / Pathology		Pathology (SDG4)		Nephrology (SDG)			Pharmacology (SGD)		Paediatrics (LGIS)		Urology(LGIS)		
	Epidemiology of parasitic disease /Renal Cell Carcinoma And Transitional Cell Carcinoma		Renal Cystic Diseases		Urinary Tract Infections			Drugs Used To Treat Urinary Tract Infection		Urinary Tract Infections		Urinary Tract Infections.		
	Batch I-P	Batch A-H	Hall 3,4	Hall 5,6	Even hall 4	Even hall 5		Even hall 3,4	Odd hall 5,6/forensic lab	Even hall 4	Odd hali 5	Even hall 4	Odd hall 5	
	Dr Aysha /Dr Zaira Pgt	Dr Unaiza (Sr Demonstrators)	Dr Fariha,,Dr Fatima Rizvi	Dr Tayyaba, Dr Sara Rafi	Dr Mudassar Murtza (BBH)	Dr Asif (asst prof, HFH)		Dr.Rubina Kausar,Dr Uzma (Demonstrator)	Dr Tahira,Dr.Zaheer (Demonstrator)	Dr Syrah Liaqat(SR .BBH)	Dr Uzma Abid(SR. HFH)	Dr M. Amin (sr. registrar)	Dr M. Ali (sr. registrar)	

Tentative Time table 4TH Year MBBS-RENAL MODULE 2023 (Fourth WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am		10:30am – 12:00pm	12:00pm - 02:00pm
Monday 9.10.23	Module Written Exam		BREAK 10:00AM – 10:30AM	CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.	
Tuesday 10.10.23	Viva All Horizontally Integrated Subjects				
Wednesday 11.10.23	Viva All Horizontally Integrated Subjects				
Thursda y 12.10.23	Viva All Horizontally Integrated Subjects				

Community Oriented Clerkship Module

Theme (AIM):

The primary purpose of this module is to educate students in those areas of the subject of CM&PH which are learnt better by onsite presence of the students at certain sites, processes, agencies which have public health relevance and in general community setting. Moreover some, areas of the subject which demands close interactive teachings in small group like HHS data analysis & report writing skills, contraceptive use skills, vaccination skills, etc. are also covered during this rotation. All opportunities available within and outside the institution within affordable logistics, time, are focused for this purpose. A short time of this batch rotation is dedicated for health education communication practices as Health awareness work and other social work.

Learning Outcomes (LOS):

At the end of this learning module students are expected to achieve following Public health Competencies as will be able to:

1. Undertake a population-based health survey (HHS)
2. Appreciate working of First level Care Facility (Public Sector)
3. Perform Community Immunization / EPI vaccinations.
4. Develop Hospital waste management plans.
5. Develop Community based health awareness message.
6. Communicate for Health awareness in community settings.
7. Commemorate International public health days.
8. Develop Hospital administration Plans.
9. Undertake Preventive healthcare inquiries and NCDs Risk Factors Surveillance
10. Counsel for the contraceptive devices to the community

Module Outline:

- A batch comprising 20-22 students is posted in the department of CM & PH for a period of 2weeks (Monday to Thursday-04 hrs. /day & for 32hrs in total). This schedule is run over the whole academic year, till all students of 4th year MBBS class passes through this rotation.
- Batch formation and schedules of rotation for whole class as notified by the DME / Student's section will be followed accordingly.
- At commencement of the academic year overall batch learning module coordinator, nomination of batch in-charges, senior faculty in charges and calendar schedule of batch rotation for all batches over the whole academic year will be notified by the Department of CM & PH.

Domains of learning: learning will occur in all the three domains C, A & P

SOPS Of Learning & Assessments:

- Active participation will be graded by the batch in charge (under a check list) during the activity / session and grades/marks will be entered in the practical manual as out of 05 (Max marks 05) by the batch in charge. 05 Max Marks are reserved for CHC (HMDTD and Health awareness work).

- Assessment will be done by OSPE / MCQs Exam / Viva voce at the end of each module and credit will be objectively recorded for the purpose of internal assessment. (Max mark 10)
- General assessment of the subject learning will be through MCQs, SEQs & OSPE on the relevant subjects in the relevant end of modules, block exams and Send up Exams.
- Students are required to report / write the relevant work in Practical Journal, House Hold Survey Report Book and log all the clerkship activities in the Logbook on daily basis.

Day	Activity -I 10.30 – 11.00	Activity – II 11.00- 11.30am	Activity -III 11.30- 01.00pm	Act-V 01.00 – 2.00pm	Sites of teaching- learning	Assessment	Session outcome (level of learning)
	Session topic	Session topic	Session topic	Session topic			
1 st day	instructing / demonstration on Practical Manual based Assignments	Visit to CHC SGIS on Healthdays commemoration work, Display material, PPT.	SGIS on HM- DTDpracticum. Topic finalization, CHC- Message draft outlines finalization.	PPT based Demo on Howto conduct & report HHS. Guidelines on PHI work to be done during clinical rotations / wardduties	<ul style="list-style-type: none"> • Demonstrati on / lec - Hall 3 • CHC - DeptCM NTB RMU. 	1-2 OSPE in end of clerkship exam (credit will part of IA) Assessment ofHHS -Report (Max marks:5part practical/viva exam 4 th Prof MBBS)	Construct a healthmessage. (C6) Prepare Health days commemoration stuff, Display material, PPT, (P) Undertake a health survey. (HHS) (C3)
2 nd day	Follow up session on. - HM-DTD work - HHS work - health days commemoration work	SGIS/ Briefing / PPT based guidelines on field visit of the day (EPI services center HFH)	FV to the EPI centerHFH	Health awareness work (HAW)	Demo Room, EPI Center HFH OPD, hospital shelters sites for health awareness work (HAW)	1-2 OSPE in end of clerkship exam (credit will part of IA) Grade of performance inEPI visit reporting. Credit of HAW	Explain cold chain component atEPI center Vaccinate (EPI) vaccinesto the clients . ComprehendEPI system
3 rd day	Follow up session on HM- DTD work & HHS	SGIS / Briefing / PPT based guidelines on FVto MCH & FP Services Center HFH	FV to the MCH services & FP centerHFH	Health awareness work (HAW)	FP Center HFH OPD, hospital shelters sites for HAW	1-2 OSPE in end of clerkship exam (credit will part of IA) Grade of performance inEPI visit reporting. Credit of HAW	Identify CP devices availableat MHC FP center Counsel clientsfor use of a contraception method Place CP devicesto client (P)
4 th day	Follow up session on HM- DTD work & HHS	Briefing / guidelines on FV Hospital waste disposal system inhospitals	FV to the hospital waste disposal system & relevant sites / Incinerator	Health awareness work (HAW)	FP Center HFH OPD, hospital shelters sites forHAW	End of module OSPE Grade of performance in visits to sites	Explain hospital waste disposal system Develop a hospital waste management plan Explains various domains of

5 th day (week 2)	SGIS / PPT based briefing on Hospital management & administration	Visit to Hospital management & administration (HFH) office	Health awareness work (HAW	HHF	End of module OSPE Grade of performance in visits to sites	hospital management (C2)
6 th day	SGIS / PPT based briefing on visit to First level of health care facility (FLCF) BHU/RHC	Field visit to RHC Khyaban Sir-Syed (RHC) or BHU	<ul style="list-style-type: none"> • Demo room / lecHall 3 NTB / CPC-Hall . • RHC / BHU 	Health awareness work (HAW at site visited	End of module OSPE Report credit in PJ	Explain working of FLCF Appreciate PHC elements at FLCF. (C2)
7 th day	Health days commemoration (walk/ seminar/ presentation/ CHC-message dissemination work (10.30 – 12.00pm)		12.00 – 2.00pm Completion & assessment of relevant Practical Journal work, HHS-report book, Logbook etc. Feedback discussion on PHI		Communication skills Comprehend frequency Preventable RFs of NCDs in the real population (RF surveillance) Undertake a preventive Healthcare inquiry	

Clinical Training Rotations 4th Year MBBS Class (Session 2019-2020)

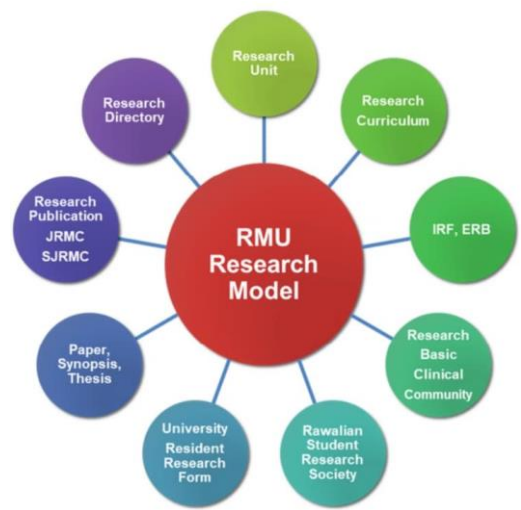
Starting w.e.f 06-03-2023 Ending 03-12-2023.

Date	Medicine /Neurology DHQ	OBS/GYN HFH I & II	OBS/GYN BBH & DHQ	C.MED	E.N.T. H.F.H.	E.N.T. B.B.H	E.N.T. D.H.Q	Medicine DHQ	EYE H.F.H	EYE B.B.H.	EYE DHQ	PEADS H.F.H	PEADS B.B.H.	CARDIO	PATH	NEUROS URGERY
06-03-2023 To 19-03-2023	A	B1, HFH-1 B2, HFH-2	C1, BBH C2, DHQ	D	E	F	G	H	I	J	K	L	M	N	O	P
20-03-2023 To 02-04-2023	B	C1, HFH-1 C2, HFH-2	D1, BBH D2, DHQ	E	F	G	H	I	J	K	L	N		O	P	A
03-04-2023 To 16-04-2023	C	D1, HFH-1 D2, HFH-2	E1, BBH E2, DHQ	F	G	H	I	J	K	L	M		O	P	A	B
17-04-2023 To 07-05-2023 Spring V.	D	E1, HFH-1 E2, HFH-2	F1, BBH F2, DHQ	G	H	I	J	K	L	M	N	P		A	B	C
08-05-2023 To 28-05-2023 Sport W.	E	F1, HFH-1 F2, HFH-2	G1, BBH G2, DHQ	H	I	J	K	L	M	N	O		A	B	C	D
29-05-2023 To 11-06-2023	F	G1, HFH-1 G2, HFH-2	H1, BBH H2, DHQ	I	J	K	L	M	N	O	P	B		C	D	E
12-06-2023 To 31-07-2023 Summer V.	G	H1, HFH-1 H2, HFH-2	I1, BBH I2, DHQ	J	K	L	M	N	O	P	A		C	D	E	F
01-08-2023 To 13-08-2023	H	I1, HFH-1 I2, HFH-2	J1, BBH J2, DHQ	K	L	M	N	O	P	A	B	D		E	F	G
14-08-2023 To 27-08-2023	I	J1, HFH-1 J2, HFH-2	K1, BBH K2, DHQ	L	M	N	O	P	A	B	C		E	F	G	H

28-08-2023 To 10-09-2023	J	K1, HFH-1 K2, HFH-2	L1, BBH L2, DHQ	M	N	O	P	A	B	C	D	F			G	H
11-09-2023 To 24-09-2023	K	L1, HFH-1 L2, HFH-2	M1, BBH M2, DHQ	N	O	P	A	B	C	D	E		G	H	I	J
25-09-2023 To 08-10-2023	L	M1, HFH-1 M2, HFH-2	N1, BBH N2, DHQ	O	P	A	B	C	D	E	F	H		I	G	K
09-10-2023 To 22-10-2023	M	N1, HFH-1 N2, HFH-2	O1, BBH O2, DHQ	P	A	B	C	D	E	F	G		I	J	K	L
23-10-2023 To 05-11-2023	N	O1, HFH-1 O2, HFH-2	P1, BBH P2, DHQ	A	B	C	D	E	F	G	H	J		K	L	M
06-11-2023 To 19-11-2023	O	P1, HFH-1 P2, HFH-2	A1, BBH A2, DHQ	B	C	D	E	F	G	H	I		K	L	M	N
20-11-2023 To 03-12-2023	P	A1, HFH-1 A2, HFH-2	B1, BBH B2, DHQ	C	D	E	F	G	H	I	J	L		M	N	O
Date	Medicine /Neurology DHQ	OBS/GYN HFH I & II	OBS/GYN BBH & DHQ	C.MED	E.N.T. H.F.H.	E.N.T. B.B.H.	E.N.T. D.H.Q	Medicine D.H.Q	EYE H.F.H	EYE B.B.H.	EYE DHQ	PEADS H.F.H	PEADS B.B.H.	CARDIO	PATH	NEUROS URGERY

13.Research

Cultivating the culture of Research has always been envisioned as one of the main pillars of Rawalpindi Medical University, as a means to develop healthcare professionals capable of contributing to the development of their country and the world. For the purpose thereof, right from the inception of Rawalpindi Medical University, efforts were concentrated to establish a comprehensive framework for research in Rawalpindi Medical University, as a matter of prime importance. With team efforts of specialists in the field of research, framework was made during the first year of the RMU, for the development and promotion of Research activities in RMU, called the Research Model of RMU, giving clear scheme and plan for establishment of required components for not only promoting, facilitating and monitoring the research activities but also to promote entrepreneurship through research for future development of RMU itself.



14. Biomedical Ethics

Ethical choices, both minor and major, confront us every day in the provision of health care for persons with diverse values living in a pluralistic and multicultural society.

Four commonly accepted principles of health care ethics, excerpted from Beauchamp and Childress (2008), include the:

1. Principle of respect for autonomy,
2. Principle of non maleficence,
3. Principle of beneficence, and
4. Principle of justice.

15. Family Medicine

Family Medicine is the primary care medical specialty concerned with provision of comprehensive health care to the individual and the family regardless of sex, age or type of problem. It is the specialty of breadth that integrates the biological, clinical and behavioral sciences. Family physicians can themselves provide care for the majority of conditions encountered in the ambulatory setting and integrate all necessary health care services.

16. Artificial Intelligence

Artificial intelligence in medicine is the use of machine learning models to search medical data and uncover insights to help improve health outcomes and patient experiences. Artificial intelligence (AI) is quickly becoming an integral part of modern healthcare. AI algorithms and other applications powered by AI are being used to support medical professionals in clinical settings and in ongoing research. Currently, the most common roles for AI in medical settings are clinical decision support and imaging analysis.