Rawalpindi Medical University Rawalpindi

Study guide

Clinically Oriented Integrated Modular Curriculum

Endocrinology Module. 4th year MBBS. (Batch 49)

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Document Revision History

Author(s)	Date	Version	Description
Dr Sana Bilal Associate Professor Department of Community Medicine , Dr Mahjabeen sr demo (Community Medicine Department)	2017-2018	1st	Developed for fourth Year MBBS. Composed of Horizontally Integrated subjects of Community Medicine, Pathology & Pharmacology and vertically integrated with Gynae & Obs .
Dr Sana Bilal Associate Professor Department of Community Medicine , Dr Mahjabeen sr demo (Community Medicine Department)	2019-2020	2nd	Developed for fourth Year MBBS. Composed of Horizontally Integrated subjects of Community Medicine, Pathology & Pharmacology and vertically integrated with Gynae & Obs, Medicine, Surgery & Pediatrics .Los revised & updated.
Dr Sana Bilal Associate Professor Department of Community Medicine , Dr Imrana Saeed APWMO, (Community Medicine Department)	2021-2022	3rd	Developed for fourth Year MBBS. Composed of Horizontally Integrated subjects of Community Medicine, Pathology & Pharmacology and vertically integrated with Gynae & Obs, Medicine, Surgery & Pediatrics .Los revised & updated Research & bioethics curriculum incorporated
Dr Sana Bilal Associate Professor Department of Community Medicine , Dr Imrana Saeed APWMO, (Community Medicine Department)	2022-2023	4th	Developed for fourth Year MBBS. Composed of Horizontally Integrated subjects of Community Medicine, Pathology & Pharmacology and vertically integrated with Gynae & Obs, Medicine, Surgery & Pediatrics. Los revised & updated Research & bioethics curriculum incorporated along with Professionalism
Dr Sana Bilal Associate Professor Department of Community Medicine , Dr Imrana Saeed APWMO, Dr Zaira Azhar PGT (Community Medicine Department)	2023-2024	5th	Developed for fourth Year MBBS. Composed of Horizontally Integrated subjects of Community Medicine, Pathology & Pharmacology and vertically integrated with Gynae & Obs, Medicine, Surgery & Pediatrics. Los revised & updated. Research & bioethics curriculum incorporated along with Professionalism. Entrepreneurship curriculum incorporated.
Dr Sana Bilal Associate Professor Department of Community Medicine, Dr Mahjabeen Sr Demo (Community Medicine Department)	2024-2025	6th	Developed for fourth Year MBBS. Composed of Horizontally Integrated subjects of Community Medicine, Pathology & Pharmacology and vertically integrated with Gynae & Obs, Medicine, Surgery & Pediatrics. Los revised & updated. Research & bioethics curriculum updated. Entrepreneurship curriculum updated.

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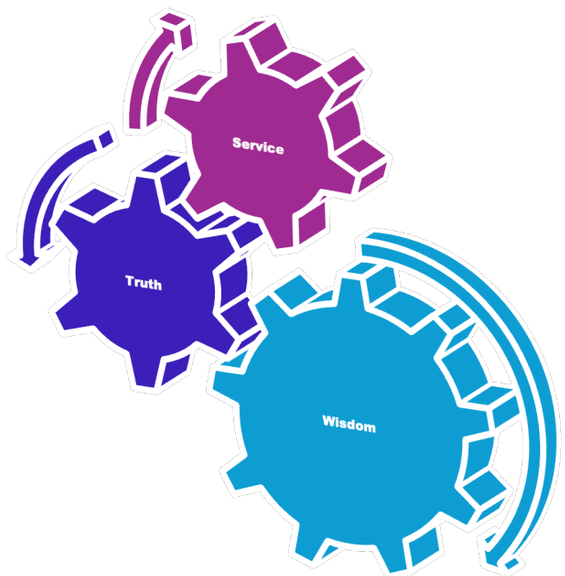
University Moto, Vision, Values & Goals

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

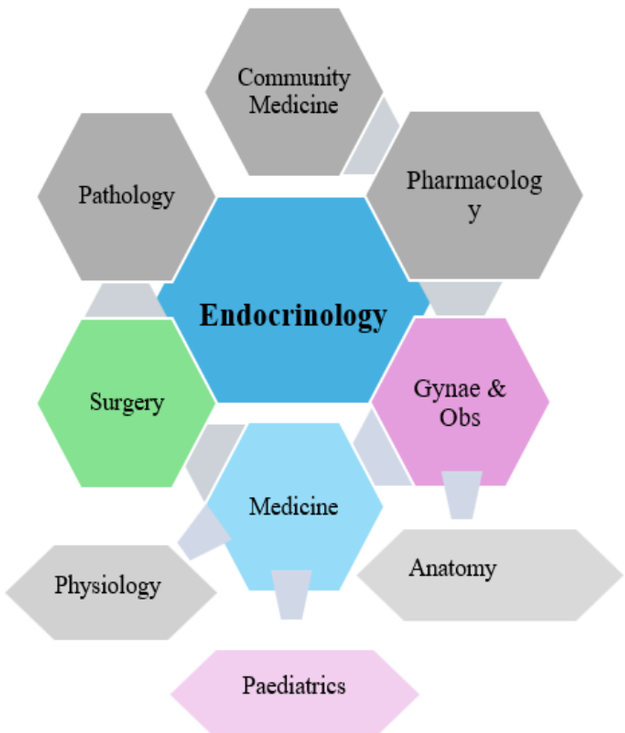
Highly recognized and accredited centre of excellence in Medical Education, using evidence-based training techniques for development of highly competent health professionals, who are lifelong experiential learner and are socially accountable.

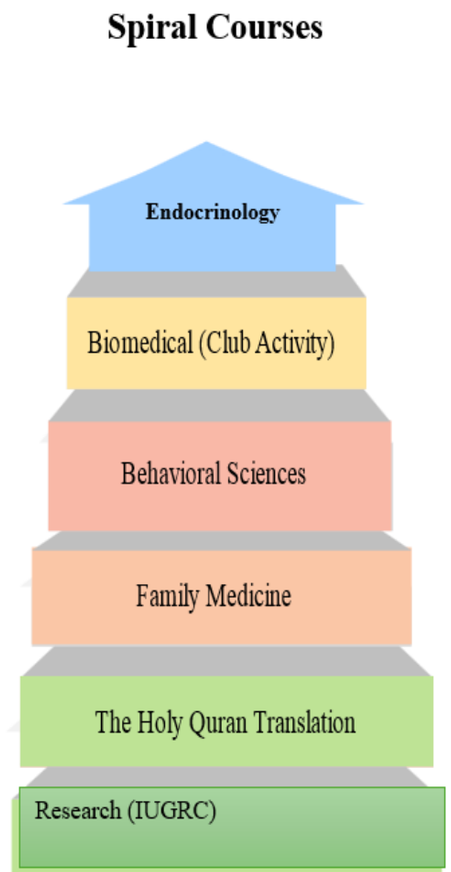
Goals of the Undergraduate Integrated Modular Curriculum

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 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.

Integration of Disciplines in Endocrinology Block





Discipline Wise Details of Modular Contents

Subjects	Embryology	Histology	General Anatomy	Gross Anatomy
• Community Medicine	• Non-Communicable • Disease introduction • (Hypertension ,CHD) • Non-Communicable Disease • (Diabetes, obesity) • Non-Communicable Diseases (Cancer) • Health care delivery system • Health care delivery system of Pakistan • Health programs of Pakistan			
• Pharmacology	• Anti-thyroid Drugs I • Anti-thyroid Drugs II • Drugs that Affect Bone Mineral Homeostasis I • Drugs Used in Diabetes I • Drugs used in diabetes II • Drugs used in diabetes III • Corticosteroid I • Corticosteroid II • Corticosteroid III • Mineralocorticoid Antagonist • Glucocorticoid Antagonists • Hypothyroidism • Corticosteroid • Diabetes mellitus			
• Pathology	• Hypothyroidism and Thyroid Tumors • Hyperthyroidism • Diabetics mellitus • Adrenal Gland/ • Hyperadrenalism • Hypoadrenalism and adrenal tumors Disorders of Post- • Pituitary Hormones • Parathyroid Disorders • Parathyroid • Adenoma/carcinoma • Pancreatic tumors, Neuroendocrine • Disorders of Adrenal medulla & MEN Syndrome • Complications of Diabetes Mellitus • Pineal gland			

Spiral Courses	
• The Holy Quran Translation	
• Bioethics & Professionalism	• Research ethics
• Family Medicine	• Core concepts of family medicine in Diabetes
• Research	• IUGRC Presentations and Manuscript writing
Vertical Integration	
• Gynae/Obs	• Thyroid in Pregnancy • Pregnancy and Diabetes • Complications of Diabetes & Gestational diabetes
• Pediatrics	• Thyroid Disorders • Diabetes Mellitus
• Surgery	• Surgical Interventions of thyroid
• Medicine	• Acromegaly • Diabetes Insipidus • Hypothyroidism • Hyperthyroidism Thyroid Disorder • Diabetes and Hypoglycemia • Diabetes Mellitus/DKA • Cushing's Syndrome and Addison's Disease

Table of Contents

1- Endocrinology Module Team

Module Name: Endocrinology

Module-order: V

Duration of Module: 4 Weeks

MODULE COMMITTEE			MODULE TASK FORCE TEAM		
1.	**Vice Chancellor RMU**	Prof. Dr. Muhammad Umar	**1.**	**Coordinator** **Co- coordinator**	Dr. Mehjabeen Qureshi Dr Asif Maqsood
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**	Dr. Khola Noreen			
6.	**Associate Dean**				
7.	**Chairperson Community Medicine**	Prof. Dr. Rozina Shahadat	**DME Implementation Team**		
8.	**Focal Person Pharmacology**	Dr.Attiya Munir	**1.**	**Director DME**	Prof. Dr. Rai Muhammad Asghar
9.	**Focal Person Community Medicine**	Dr. Sana Bilal	**2.**	**Add. Director DME**	Dr. Khola Noreen
10.	**Focal person Pathology**	Dr. Syeda Ayesha	**3.**	**Deputy Director DME**	Dr. Saadia Chaudhary
11.	**Focal person family medicine**	Dr Saadia	**4.**	**Assistant Director DME/Module planner & Implementation coordinator**	Dr. Omaima Asif
			5.	**Editor**	Dr. Omaima Asif

Module Preparation team

Professor Dr Rozina Shahadat Khan
HOD Community Medicine Department

Dr Mehjabeen Qureshi
Coordinator

Dr Asif Maqsood
Co-Coordinator

Department of Community Medicine
Rawalpindi Medical University

2-University Motto, Vision, Values & Goals

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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 (Even)tually 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, pr(Even)tion 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 website.

3-Terms & Abbreviations

Contents

Tables and figures

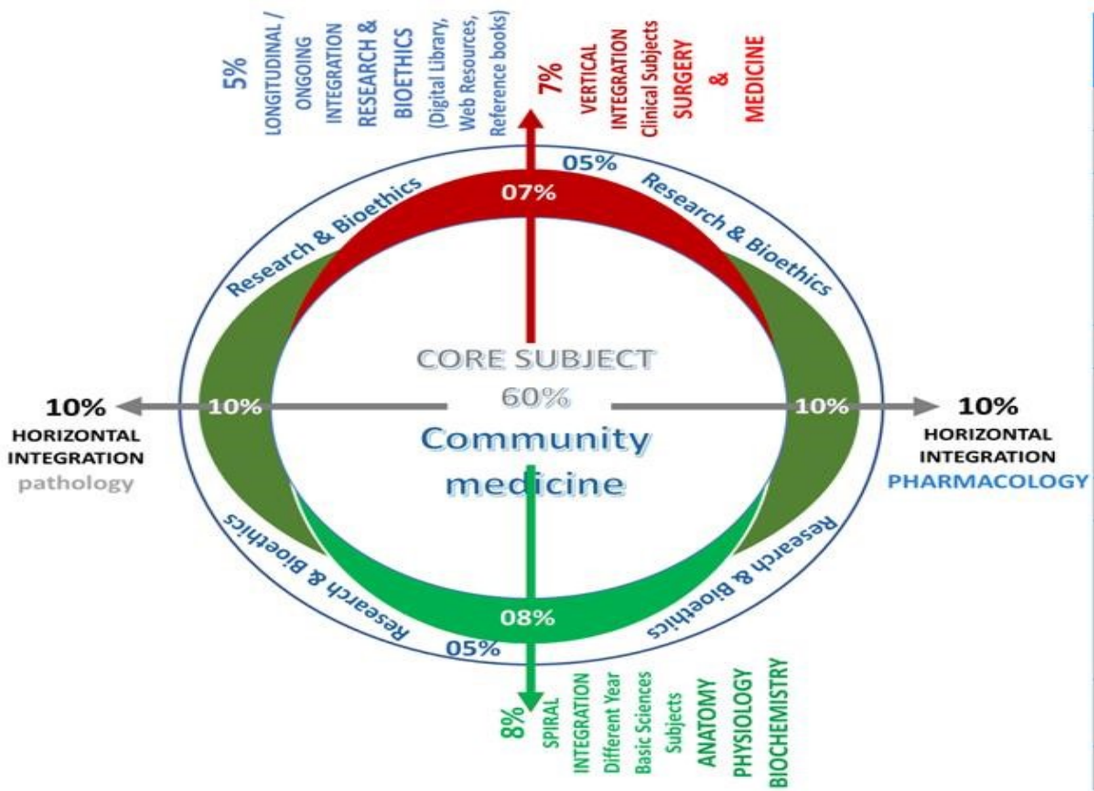
4- Domains Of Learning According to Blooms Taxonomy

Abbreviation	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.



4th Year community medicine LGIS (≈30 slides)	
Core Subject – 60% (≈ 18-20 slides)	
Community medicine (≈ 18-20 slides)	
Horizontal Integration – 20% (≈ 5-6 slides)	
Same Year Subjects	• Pharmacology (10%) (≈ 2-3 slides) • Pathology (10%) (≈ 2-3 slides)
Vertical Integration – 07% (≈ 2-3 slides)	
Clinical Subjects	• Medicine (3-5%) (≈ 1-2 slides) • Surgery (3-5%) (≈ 1-2 slides)
Spiral Integration – 08% (≈ 2-3 slides)	
Different Year Basic Sciences Subjects	• Anatomy (1-3%) (≈ 1-2 slides) • Physiology (1-3%) (≈ 1-2 slides) • Biochemistry (1-3%) (≈ 1-2 slides)
Longitudinal / Ongoing Integration – 05% (≈ 1-2 slides)	
Research & Bioethics (≈ 1-2 slides)	

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. 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%

Step 1	**Sharing of Learning objectives by using students Study guides**	**First 5 minutes**
Step 2	Asking students pre-planned questions from previous teaching sessionto 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	

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 (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. Peer Assisted Learning (PAL)
    Community medicine
6. Skill Lab
    Pathology
    Pharmacology
7. Case Based Learning (CBL)
    i. Pathology
    ii. Pharmacology
8. Wards, operation theatres
    i. Surgery
    ii. Medicine
    iii. Gynae& obs

Horizontally Integrated Basic Sciences

S no	Subjects	Teaching hours without practical/PAL
1	Pathology (LGIS+SGD+CBL)	13
2	Community medicine (LGIS+SGD)	7
3	Pharmacology (LGIS+SGD+CBL)	13

PATHOLOGY

Large Group Interactive Session (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	• 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) explain hypothyroidism 2)classify and explain benign and malignant neoplasms of thyroid	C2 C2	LGIS	MCQs, SEQs, OSPE Viva
Hyperthyroidism	• 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	• Introduction • , classification & causes of Diabetes Mellitus • Plasma glucose regulation • Pathophysiology of DM • Investigation for DM	• Students should be able to 1) classify Diabetes Mellitus 2) Diagnose, and explain pathogenesis of diabetes along with glucose homeostasis.	C2 C3	LGIS	MCQs, SEQs, OSPE Viva
Adrenal Gland/ Hyperadrenalism	• Introduction to H**yperadrenalism** • Types • Investigation of H**yperadrenalism**	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	• Introduction to hypoadrenalism • Types • Investigation of hypoadrenalism	Students should be able to 1) describe the pathophysiology of Addison's disease and other hypo adrenal disorders 2)To describe the pathophysiology and microscopic features for diagnosis of adrenal cortical adenoma and carcinoma	C2, C3	LGIS	MCQs, SEQs, OSPE Viva

Small Group Discussion (SGDs)

Demonstration	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives After the Session Students Will Be Able To:	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	• explain hypopituitarism and posterior pituitary gland diseases	C2	SGD	MCQs, SEQs, OSPE Viva
Parathyroid Disorders	Introduction to parathyroid disorders and its Investigations	• explain Parathyroid Disorders, clinical features and pathophysiology	C2	SGD	MCQs, SEQs, OSPE Viva
Parathyroid Adenoma/carcinoma	Introduction to parathyroid adenoma /carcinoma, clinical features, pathophysiology and its Investigations	• explain Parathyroid Adenoma/carcinoma, clinical features and pathophysiology	C2	SGD	MCQs, SEQs, OSPE Viva
Pancreatic tumors, Neuroendocrine	Introduction to Pancreatic tumors, Neuroendocrine, clinical features, pathophysiology and its Investigations	• explain Pancreatic tumors, Neuroendocrine diseases	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	• describe the pathophysiology and microscopic features of pheochromocytoma • explain the diagnostic features of MEN 1 and MEN 2 syndromes.	C2 C3	SGD	MCQs, SEQs, OSPE Viva

Case Based Learning (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	• 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	• Describe in detail the pathological findings • Explain the lab investigations required for diagnose	C2 C2	MCQs

Skill Lab

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	• Classify different types of thyroiditis • Identify gross features and microscopic features such as Massive lymphoplasmacytic infiltration with lymphoid follicles formation and large active germinal center in Hashimoto's thyroiditis • Explain 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 disease • Identify microscopic features such as closely packed small follicles lined by cuboidal epithelium, within a fibrous capsule in follicular adenoma • Identify 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 C2	OSPE/OSCE

Chronic pancreatitis & pancreatic carcinoma	Pancreatic pathologies and differences between them	• Identify and explain the gross and microscopic features of chronic pancreatitis • Differentiate 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	• 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 C3	OSPE/OSCE

Self-Directed Learning (SDL)

SR. NO.	TOPIC	LEARNING OUTCOMES At the end of session students will be able to:	REFERENCE
01	contributions of the endocrine system to homeostasis	• Describes the effects of endocrine system on homeostasis.	Robin Basic Pathology 10th Edition Chapter Endocrine System Page: 749
02	Summarize the site of production, regulation, thyroid gland	• Discuss steps of production and regulation of Thyroid hormone	Robin Basic Pathology 10th Edition Chapter Endocrine System Page: 755 – 756
03	Investigations of a case of goiter	• Know basic laboratory investigations of a case of Goiter	Robin Basic Pathology 10th Edition Chapter Endocrine System Page: 762 – 763
04	Investigations of Diabetes Mellitus	• Know basic laboratory investigations of a case of Diabetes Mellitus	Robin Basic Pathology 10th Edition Chapter Endocrine System Page: 772

Staff / Human Resource Distribution of Department of Pathology

Sr.no.	Designation	Total number of teaching staff
1	Professor	01
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. 1/4th class	2 x 5= 10hrs.	5	Assistant professors
3	CBL (2) approx. 1hrs per session. (4 small group sessions. 1session per day)	2 x 4 = 8hrs.	2	Demonstrator (subject specialists) supervised by professional faculties
4	SDL (4)	1 x 4 = 4 hrs.	4	Demonstrators (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/ Hypoadrenalism		Disorders of Post-Pituitary Hormones	contributions of the endocrine system to homeostasis.	Complications of Diabetes Mellites
Hyperthyroidism	Hypoadrenalism adrenal tumors	and	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, Assc 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)

Pathology Faculty Wise Lecture Allocation

Sr. No.	Faculty Nominated	Designation	No Of Lectures
1.	Prof Mobina Ahsan Dodhy	Chairperson Professor of Pathology	04
2.	Dr. Fatima tuz Zahra	Assistant Professor	05
3.	Dr. Rabiya Khalid	Assistant Professor	05
4.	Dr. Kiran Fatima	Assistant Professor	04
5.	Dr. Sarah Rafi	Demonstrator	03
6.	Dr. Amina Noor	Demonstrator	01
7.	Dr. Mehreen Fatima	Sr. Demonstrator	03
8.	Dr. Mudassira Zahid	Associate Professor	04
9.	Dr. Unaiza Aslam	Demonstrator	01
10.	Dr. Nida Fatima	Demonstrator	01
11.	Dr. Abid Hassan	APMO	01
12.	Dr. Faiza Zafar	Sr. Demonstrator	01
13.	Dr. Syeda Aisha	Demonstrator	01
14.	Dr. Syed Iqbal Haider	Sr. Demonstrator	01

COMMUNITY MEDICINE

Large Group Interactive Session (LGIS)

Topic	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives After the Session Students Will Be Able To:	Learning domain	Assessment tool
Non-Communicable Disease introduction (Hypertension ,CHD)	• Epidemiology of • Hypertension, CHD • Prevention of hypertension,CHD • Classification • Rules of halves	• Explain criteria of Chronic Non-Communicable diseases. (NCDs) • Appraise the burden of NCDs in inter- & national context. • Describe list of major NCDs of the region. • Describe common Risk Factors of NCDs. • Explain gaps in knowledge in natural history of NCDs & General preventive approaches • Explain epidemiology, prevention & control strategies for cardiovascular diseases (CHDs) • Explain epidemiology, prevention & control strategies for Hypertension • Explain rules of halves & tracking of Blood Pressure strategy (hypertension)	C2 C2 C2 C2 C2 C3 C3 C3	MCQs, SEQs, OSPE, Viva
Non-Communicable Disease (Diabetes, obesity)	• Epidemiology of • diabetes & obesity • Prevention & • control of diabetes • & obesity • Classification of diabetes & obesity & • Assessment of • Body mass index	• Describe the risk factors and their importance in causation of diabetes & obesity • Apprehend the burden of diabetes & in Pakistan • Classify diabetes & obesity • Define & Measure obesity via different methods of obesity assessment • Calculate body mass index and interpret the results • Recommend approaches to prevention and control of diabetes and obesity in community	C2 C2 C2 C2 C3 C3	MCQs, SEQs, OSPE, Viva
Non-Communicable Diseases (Cancer)	• Epidemiology of • cancers • Prevention & • control of cancers • Warning signs of • cancer	• Differentiate categories of cancers • Identify epidemiology of cancers • recommend the approaches for prevention of cancers in the community	C2 C2 C3	MCQs, SEQs, OSPE Viva
Health care delivery system	• Objectives, components & models of Health care system	• Define health system • Enlist health system models • Comprehend components of healthcare delivery system • Illustrate the functions and objectives of health system	C1 C1 C3 C2	MCQs, SEQs, OSPE Viva

Health care delivery system of Pakistan	• Levels and functions of healthcare system Tiers & functions of healthcare system of Pakistan	• Describe the levels of health care system • Elaborate the healthcare services available at all levels of healthcare system • Describe the tiers of health care system of Pakistan • Discuss the functions of healthcare system of Pakistan	C2 C2 C3 C2	MCQs, SEQs, OSPE Viva

Small Group Discussion (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	• Malaria control program • TB control program • AIDS control program • Hepatitis control program • National program of family planning	• Explain program and National Health programs. • Enlist & elaborate 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 C3	MCQs, SEQs, OSPE and Viva Voce

Self-Directed Learning (SDL)

#	Topics	Learning objectives. Students will be able to …	Learning resource
1	Epidemiology of Stroke	• Describe problem statement of stroke. • Risk factors of stroke • Strategies for stroke control in population	K Park Ed. 27th (pg. 377-78)
2	Epidemiology of Rheumatic Heart disease (RHDs)	• Describe problem statement of RHDs. • Epidemiological factors of RHDs. • WHO criteria for diagnosis of RHDs • Approaches for Pr(Even)tion of RHDs in population	K Park Ed. 27th (pg. 378-81)
3	Adolescent health	• Discuss normal adolescent development, its impact on health • Counselling of adolescents with specific conditions • Identification of normal growth and pubertal development • Manage common health &mental health conditions, nutritionrelated disorders • Identify signs of substance use and substance use disorders	K Park Ed. 27th (pg. 670-73)

Peer Assisted Learning (PAL) IUGRC

Indictors of accomplishment Prior readings / assigned work	Learning objectives/ competencies	Learning outcomes By the end of lecture student will be able to:	Assessment strategy
Endo session 1 **Preparing students for students Report writing and oral presentation**	- Interpret & apply basic principles of **manuscript writing** of research report - Perceive authorships requirements or rules of drafting manuscript of a research report for publication in indexed journal - Write discussion section of draft - Report research as oral presentation and poster presentation according to standard guidelines - Finalization of preparation of PowerPoint presentation for final research day - practice basic communication skills -	At the end of session students should be able to; -explain principles of research manuscript writing for publication -write report for oral presentation - reporting on poster - explain rules of discussion on results of study - clarify types of citations included in discussion section - explain conclusion, recommendation and acknowledge part of research report.	1. MCQ in each block exam 2.Viva exam at the end of the session
Edo session 2 **Research presentations**			

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	04
5	PGTs	07

Categorization of The Content of Community Medicine

Category A*	Category B**		Category C***	
LGIS	LGIS	SDGS	SDL	IUGRC SESSIONS (PAL)
Fundamental concepts of epidemiology, prevention & control of non-communicable diseases (NCDs), risk factors of hypertension, CHD, Stroke	Health systems	Health programs in Pakistan	Epidemiology of Stroke	Manuscript writing
Fundamental concepts of epidemiology, prevention & control of noncommunicable diseases (NCDs) diabetes	Health care delivery system of Pakistan		Epidemiology of Rheumatic Heart disease (RHDs)	Defense of research (presentations)
Fundamental concepts of epidemiology, prevention & control of noncommunicable diseases (NCDs) Cancers			Adolescent health	

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)

Community medicine Faculty Wise Lectures Allocation

Sr no	Faculty nominated	No of lectures
1.	Prof Dr Rozina Shahadat Khan	02
2.	(Assc Prof) Dr. Khola Noreen	02
3.	(Assc Prof) Dr. Sana Bilal	01
4.	(Asst Prof) Dr. Afifa kulsoom	02
5.	(Asst Prof) Dr Mehwish Riaz	02
6.	(Asst Prof)Dr. Farah Pervaiz	01
7.	(APMO) Dr. Imrana Saeed	02
8.	(APMO) Dr Narjis Zaidi	02
9.	(Sr Demo) Dr. Mehjabeen Qureshi	02
10.	(Sr Demo) Dr. Asif Maqsood	01

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 (1) approx. 2hrs each session. 1/2class	1 x 2= 2 hrs.	1	Demos (subject specialists), Senior PGTs
3	PAL (IUGRC) (2) approx. 2hrs per session. (16 small groups)	2 x 16 =32hrs.	4	Demos (subject specialists) supervised by senior faculties
4	SDL (3)	3 x 1 =3 hrs.	3	Demos (subject specialists)
		Total: 49 hrs	14hrs	

PHARMACOLOGY

Large Group Interactive Session (LGIS)

Topic	Contents Outline & Sub- Topics)	Learning Objectives	Learning Domain	Assessment Tool
Anti-thyroid Drugs I	• Thyroid preparations	• 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	• 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 C2	MCQ/SEQ
Drugs that Affect Bone Mineral Homeostasis I	• Principal hormonal Regulators • Pharmacokinetics and pharmacodynamics of vitamin d	• 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 hypoglycemic • Sulfonylureas Meglitinides	• 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 C2	MCQ/SEQ

Drugs used in diabetes II	• Biguanides Alpha-glucosidase • inhibitors • Thiazolidinediones Amylin analogs	• Discuss the 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 C3	MCQ/SEQ
Drugs used in diabetes III	• Insulin	• Classify Insulins Compare animal & human insulins • Discuss the kinetics of different insulins with clinical significance • Describe the uses & adverse effects of Insulins Describe insulin resistance	C1 C2	MCQ/SEQ
Corticosteroid I	• Classification Mechanism of action	• Classify corticosteroids Describe the mechanism of action of	C1	MCQ/SEQ
Corticosteroid II	•	• Corticosteroids • Describe the actions of glucocorticoids Describe the Uses of Corticosteroids	C2	
Corticosteroid III	• • Uses • Adverse effects Contraindications	• • 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 (SGD)

Topic	**Learning objectives** **At the end of sessions, students will be able to:**	**Learning domain**	**Assessment tool**
Mineralocorticoid Antagonist	• Enumerate mineralocorticoid antagonists • Describe the mechanism of action of mineralocorticoid antagonists	C2 C2	MCQ
Glucocorticoid Antagonists	• Enumerate glucocorticoid antagonists • Describe the mechanism of action of glucocorticoid antagonists	C2 C2	MCQ

Case Based Learning (CBL)

Topic	Learning objectives At the end of the session students will be able to:	Learning Domain	Assessment tool
Hypothyroidism	• Describe different Thyroid Preparations • Dose adjustment in different scenarios	C2 C3	PBQ / Scenario Based Questions
Corticosteroid	• 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 • Identify the contraindications of corticosteroids	C2 C2 C2 C2 C2 C3	PBQ / Scenario Based Questions
Diabetes mellitus	• Classify the drugs used in the management of DM • Identify the drug group preferred in the given case	C2 C3	PBQ / Scenario Based Questions

Skill Lab

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 • Diabetes Mellitus type II • Graves' Disease • Adrenal Insufficiency	C2	OSPE

Self-Directed Learning (SDL)

TOPIC	LEARNING OUTCOMES At the end of session students will be able to:	REFERENCE
Post Covid incidence of thyroid diseases and their pharmacological treatment	• define hypothyroidism • Correlate 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	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 The Association Between COVID-19 and Thyroxine Levels: A Meta-Analysishttps://www.frontiersin.org/articles/779692
Bisphosphonates and bone mineral diseases	• Classify drugs used for bone mineral diseases • Describe mechanism of action and uses of bisphosphonates • Describe adverse effects of bisphosphonates	The Effect of Bisphosphonates on Fracture Healing Time and Changes in Bone Mass Density: METAAnalysishttps://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

Nuclear receptors coactivators	• Descried Steroid receptor signaling mechanisms • Discuss the role of coactivators in steroid receptor functioning • Enumerate the drugs acting through steroid receptor activation	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%BAB%20Signaling%20by%20CREB%2Dbinding%20Protein%20and%20Steroid%20Receptor%20Coactivator%2D1*
DPP-4 INHIBITORS AND PANCREATIC CARCINOMA	Risk of dipeptidyl peptidase-4 (DPP-4) inhibitors on sitespecific cancer: A systematic review and meta-analysis https://onlinelibrary.wiley.com/doi/abs/10.1002/dmrr.3004	Dipeptidyl Peptidase-4 Inhibitor–Associated Pancreatic Carcinoma https://journals.sagepub.com/doi/abs/10.1177/1060028015610123?journalCode=aopd#:~:text=Dipeptidyl%20Peptidase%2D4%20Inhibitor%E2%80%93Associated%20Pancreatic%20Carcinoma

Human Resource Distribution of Department of Pharmacology

Sr.no.	Designation	Total number of teaching staff
1	Professor	00
2	Associate professor	00
3	Assistant professor	02
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. 1/4th class	9 x 2= 18 hrs. Facilitator x hours	2	Demos (subject specialists), Senior PGTs
3	Practical (1) approx. 2hrs per session	2 x 9 =18 hrs. Facilitator x hours	2	Demos (subject specialists) supervised by professional faculties
4	CBL (3)	9 x 3 =27hrs. Facilitator x hours	3	Demos (subject specialists)
		Total: 79	15 hrs	

Categorization of Modular Content of Pharmacology Department

Category A*	**Category B****	**Category C*****		
LGIS	Practical	SDGS/CBLS	SDL	
Anti-thyroid Drugs I Anti-thyroid Drugs II Drugs that Affect Bone Mineral Homeostasis I Drugs Used in Diabetes I Drugs used in diabetes II Drugs used in diabetes III Corticosteroid I	P -Drug and prescription writing on • Diabetes Mellitus type II • Graves' Disease • Adrenal Insufficiency	Mineralocorticoid Antagonist Glucocorticoid Antagonists Hypothyroidism Corticosteroid Diabetes mellitus	Post Covid incidence of thyroid diseases and their pharmacological treatment Bisphosphonates and bone mineral diseases Nuclear receptors coactivators DPP-4 Inhibitors And Pancreatic Carcinoma	

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)

Pharmacology department Lecture Distribution

Sr No.	Faculty Nominated	No of Lectures
1	Associate Professor	00
2	Assistant Professor Dr Zunera	09
3	Assistant Professor Dr Attiya	08
4	Demo Dr Zaheer	06
5	Demo Dr Ayesha	06
6	Demo Dr Arsheen	07
7	Demo Dr Zoefishan	06
8	Demo Dr Mamuna	06
9	Demo Dr Uzma	09
10.	Dema Dr Saba	06

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	• 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	• 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 C3	MCQ/SEQ
Surgical intervention of adrenal gland	Surgical anatomy and surgical intervention of adrenal gland	• 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
Surgical intervention of Thyroid gland	Surgical anatomy of thyroid, diseases of thyroid and their management	• Briefly describe anatomy of the thyroid gland and vascular supply • Enlist important clinical signs and symptoms of different benign and malignant diseases of thyroid • Approach towards a patient with thyroid pathology. • Outline pre-operative work up for thyroid gland • Managing patient with thyroid pathology • Enlist the surgical procedure of thyroid	C2 C2 C2 C3 C3 C2	MCQs /SEQs

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	• 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	• 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 C2	MCQ/SEQ
Hypothyroidism Hyperthyroidism Thyroid Disorder	Causes, C/F, investigations, treatment & complications of hypothyroidism Thyroiditis & Grave's disease Comparison of hyper and hypothyroidism	• 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 • Compare and differentiate between hyperthyroidism and hypothyroidism • Explain thyroiditis and graves' disease. • Enlist various types of thyroid disorders. • Differentiate between clinical features of hyperthyroidism and hyperthyroidism.	C1 C2 C2 C3 C2 C3 C3 C2 C1	MCQ/SEQ MCQ/SEQ MCQ/SEQ
Diabetes and Hypoglycemia		• Enlist types of diabetes mellitus. • Diagnose diabetes mellitus. • Develop management plan for diabetes mellitus, including both pharmacological and nonpharmacological therapies. • Identify clinical features of hypoglycemia and discuss management plan	C2 C3 C3	MCQ/SEQ

Diabetes Mellitus/DKA	C/F of diabetic ketoacidosis and its diagnosis Managing complication of DM	• Define Diabetes ketoacidosis • Discuss its clinical features Plan • • relevant investigations Diagnose and manage complications of diabetes mellitus. • (DKA, HONK) • Discuss treatment and management plan. Outline • DKA and its management • Counsel the parents. Do follow-up	C1 C2 C3 C3 C2 C2 C2 C3 C3 C3	MCQ/SEQ
Cushing's Syndrome and Addison's Disease	C/F, diagnosis, causes and management of Cushing's Syndrome and Addison's Disease	• 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
Hyperaldosteronism	C/F, diagnosis, causes and management of Hyperaldosteronism	• Identify clinical presentation of Hyperaldosteronism and describe diagnostic workup and management	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** **After The Session Students Will Be Able To:**	**Learning Domain**	**Assessment tools**
Thyroid in pregnancy	C/F of thyroid disorders in pregnancy & management	• Enlist thyroid disorders during pregnancy • Illustrate clinical presentation of thyroid disorders in pregnancy • Discuss feto-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	• 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	• 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)**	**Learning Domain**	**Assessment tools**
Diabetes Mellitus	Diabetes mellitus and its complications	• 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	• 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**

Informed consent	Discussion will cover; Prerequisites of inform consent in different situations	At the end of the session students should be able to; • Recognize the importance of obtaining valid consent from a patient for investigations and treatment • Analyze how to proceed • Elucidate how to proceed if a patient is incompetent to give consent • Reflect when it is justifiable to refrain from obtaining patient consent • Formulate the decision about giving relevant information to a patient or family by a medical student/doctor • Critically appraise the Inappropriate and • Appropriate Informed Consent Form	C2 C2 C2 C3 C3	1-2MCQs of level C1 to C3 will cover this session teachings	http://nbcpakistan.org.pk/assets/may16bioethicsfacilitator-book--- may-16%2c-2017.pdf (page 74)

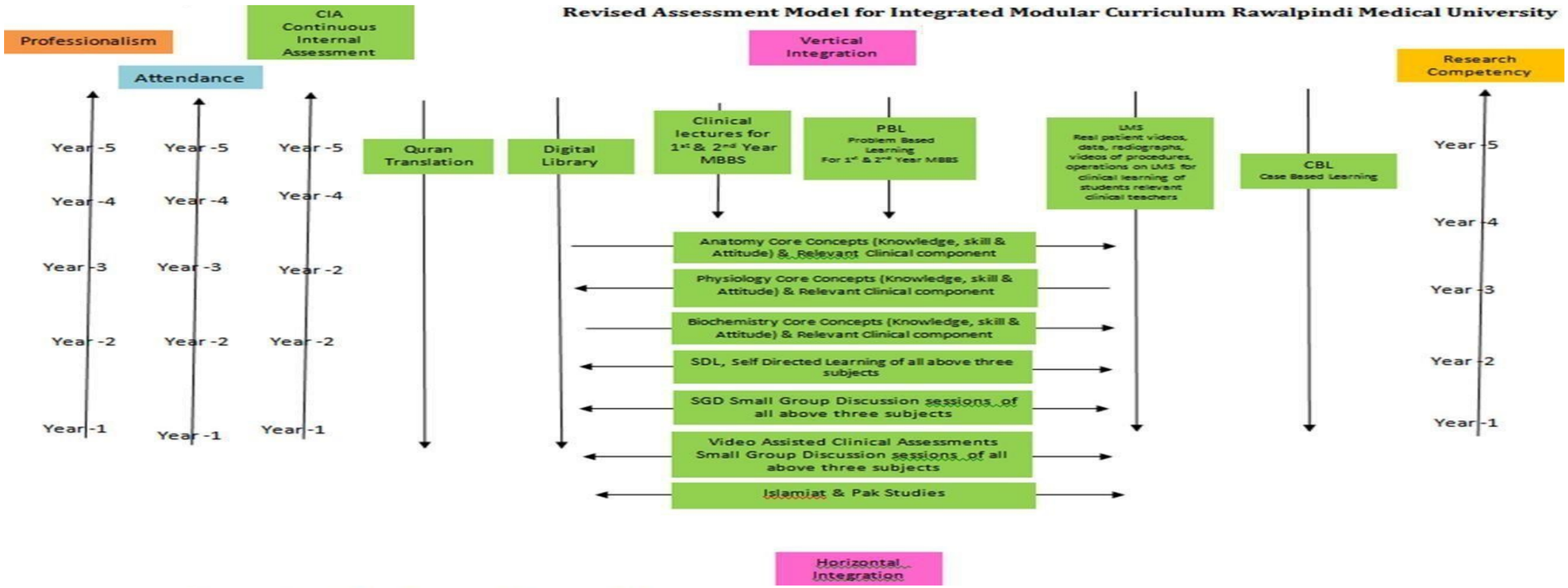
Learning Objectives of Family Medicine (LGIS)

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; • Explain the management strategies of a diabetic patient in general practice including the psychosocial impact of disease on patient and their families • Describe the strategies for pr(Even)tion of diabetes mellitus and its complications • Identify the red-flags in a diabetic patient and appropriately refer to specialty care when required • Describe the aetiology, risk factors and complications of obesity • Explain the role of diet, exercise and anti-obesity drugs in the management of obesity and its complications • Identify the red-flags in an obese patient and appropriately refer to specialty care when required • Explain the psychosocial impact of disease on patient and their families	C3 C2 C2 C2 C2 C2 C3	MCQS

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.

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, LGIS (LMS).

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

Modular Examinations:

Theory Paper:

There is an 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, extended matching question, short answer 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 video assisted & practical OSPE.

Theory Paper

There is one written paper for each subject. The paper consists of objective type questions, extended matching question, short answer 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 plan

Types of Assessment:

1. Formative
2. summative

Formative Assessment

Formative assessment will be done at the end of module as reflective writing & multiple-choice questions through LMS. 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 weekly through LMS as well as at the end of module/ block and will be subject wise

Assessment Frequency & Time in Endocrinology Module

	Endocrinology Module	Type of Assessments	T otal Assessment Time			No. of Assessments	
Sr #	Types of Assessments	Nature of assessment	Assessment Time	Summative Assessment Time	Formative Assessment Time	Formative	Summative
1	Weekly LMS based assessments (pathology 20, Community Medicine 20, pharmacology20) (60 MCQs)60 marks	summative	60 Minutes per wk.=3hrs	15 hours	1hr 30 Minutes	02	05
3	End Module Examinations	Summative	Detailed below				
	Breakup of EOM Assessment						
	i. Community medicine (5SEQs,5 SAQs, 1 EMQ & 25 MCQs) 100 marks	Summative	3 Hrs.				
	ii. Pathology 5SEQs,7 SAQs, 1 EMQ and 25 MCQs) 100 marks	Summative	3 Hrs.				
	iii. pharmacology 5SEQs,7 SAQs, 1 EMQ and 25 MCQs) 100 marks	Summative	3 Hrs.				
4	iv (video assisted OSPE) for each subject 10 stations(50 marks)	Summative	50 minutes				
	V. Ward test at the end of two weeks rotation in clinical subjects & End of clerkship C med		1 hr. 40 min				
5.	I. Reflective writing	formative	45+45=90 min				
	II. End Module LMS based MCQs (45 MCQs) 45 marks						

Table of specifications (TOS) End of week assessment of endocrinology module (LMS-MCQs)

S. No	Discipline	Type of Assessment	Number of MCQs	Cognitive domains			Marks
				C1	C2	C3	
	LMS 1						
1.	Community medicine	summative	20	4	5	11	20
2.	Pathology	Summative	20	4	5	11	20
3.	Pharmacology	summative	20	3	5	12	20
	LMS II						
4.	Medicine & Allied	formative	10	2	3	5	10
5.	Surgery & Allied	formative	10	2	3	5	10
6.	Bioethics, Research, AI Longitudinally running disciplines	formative	10	2	3	5	10
	Total		90	17	24	49	90

Type of Assessment ----------Community Medicine

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Venue	Frequency
1.	End of wk. MCQ based Test	summative	Weekly	LMS	01 x no. of weeks
2.	Theory (MCQ+SEQ+ SAQs + EMQ)	Summative	End of module	On campus	01
3.	End of module AV OSPE	Summative	End of module	On campus	01
4.	End of clerkship Exam MCQs, OSCE	summative	end of clerkship batch	On campus	01 x 2 wks

Type of Assessment---------- Pharmacology

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Venue	Frequency
1.	End of wk. MCQ based Test	summative	Weekly	LMS	01 x no. of weeks
2.	Theory (MCQ+SEQ+ SAQs + EMQ)	Summative	End of module	On campus	01
3.	End of module AV OSPE	Summative	End of module	On campus	01
4.	End of Skill lab Exam, MCQs	summative	End of module	On campus	01

Types of Assessment------- Pathology

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Venue	Remarks

1.	End of wk. MCQ based test	summative	Weekly	LMS	01 x no. of weeks
2.	Theory (MCQ+SEQ+SAQs + EMQ)	Summative	End of module	On campus	01
3.	End of module AV OSPE	formative	End of module	O	01
4.	End of Skill lab Exam, MCQs,	summative		On campus	01

Table of Specification for end of block Assessment (TOS)

Block Name& Order	Modules Names & Numbers	Subject	Theory			Scheme of Integration						Total marks Theory	Practical Assessment									Total Block marks	End of block LMS MCQs
			25 MCQs (1 mark each)	5+1 SAQ +EMQ (5 marks each)	5 SEQs (9marks each)	Core Subject. 70%		Hori- & Verti-Integ. 20%		*Spiral Integ. 10%			OSVE				OSPE (05 marks each)			Total marks Practical		
													Module I		Module 2		Observed	Unobserved	Video assisted			
Population Medicine & reproduction	Endocrinology	Community medicine	25	25+5	45	19	46	4	12	2	7	100	-						10 stations				
		Pharmacology	25	25+5	45	19	46	4	12	2	7	100							10 stations				
		Pathology	25	25+5	45	19	46	4	12	2	7	100							10 stations				
	Population Med & Reproduction	Community medicine	25	25+5	45	19	46	4	12	2	7	100	Viva marks	Book marks	Viva marks	Book marks	10 stations	10 stations	10 stations		400	30
													45	5	45	5	50	50	10	300		
		Pharmacology	25	25+5	45	19	46	4	12	2	7	100	45	5	45	5	50	50	10	300	400	30
		Pathology	25	25+5	45	19	46	4	12	2	7	100	45	5	45	5	50	50	10	300	400	30

11- Timetable

Rawalpindi Medical University Rawalpindi

Tentative Time Table 4th year MBBS-Endocrinology Module 2025 (1st week)

DATE / DAY	8:00 AM – 9:00 AM		09:00am – 10:00am		BREAK 10:00AM – 10:30	10:30am – 12:00pm	12:00pm - 02:00pm
Monday 9.6.25	**LGIS**		**ETHICS (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.**	
	Quran class		Informed consent				
	Qari Abdul Wahid lec hall 1		**(odd) lec hall 1**	**(Even) lec hall 2**			
			Dr Affifa Kalsoom AP	Assoc Prof Dr Khola Noreen			
Tuesday 10.6.25	**MEDICINE(LGIS)**		**COMMUNITY MEDICINE**				
	Acromegaly		Non- Communicable, HTN, CHD				
	(odd) lec hall 1	**(Even) lec hall 2**	**(odd) lec hall 1**	**(Even) lec hall 2**			
	Dr Nida	Dr Shahzad Manzoor	Dr Imrana Saeed APMO	Assc Prof Dr. Sana Bilal			
Wednesday 11.6.25.	**PATHOLOGY (SGD)**		**MEDICINE (LGIS)**				
	Posterior Pituitary Hormones and their Disorders		Diabetes Insipidus				
	(odd) lec hall 1,3	**(Even) lec hall 2,6**	**(odd) lec hall 1**	**(Even) lec hall 2**			
	DR Fatima Zahra, Dr Rabiya Khalid	Dr Sara, Dr Kiran Fatima	Dr Saima Ambreen	Dr Shahzad Manzoor			
Thursday 12.6.25	**PATHOLOGY (LGIS)**		**FAMILY MEDICINE (LGIS)**				
	Hypothyroidism and Thyroid Tumors		Care concepts of FM in NCDs (diabetes, Obesity)				
	(odd) lec hall 1	Lec hall 2	CPC hall. Combined class				
	Prof Mobeena	Dr Mudassira	Dr Saadia HOD (family medicine dept.)				
Friday 13.6.25.	**08:00AM – 09:45AM**		**09:45AM – 10:30**		**10:30AM – 11:15AM**	**11:15AM – 12:00PM**	
	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 hypothyroidism	

	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& senior faculty		Dr Amina Noor		Dr. Rabiya Khalid		Dr. Fatima Zahra		Dr Attiya		Dr. Zunaira		Dr Mojeeb		Dr Nida			
Saturday SEMINAR THYROID	**08:00AM – 09:45AM**				**09:45AM – 10:30**				**10:30AM – 11:15AM**			**BREAK**	**11:45AM – 12:30PM**		**12:30PM – 01:15PM**		**01:15PM – 02:00PM**	
	PAL/ skill lab Community Medicine / Pathology				**PHARMACOLOGY (LGIS)**				**PEDIATRICS (LGIS) 11:15**				**MEDICINE (LGIS)**		**Gynae (LGIS)**		**Surgery (LGIS)**	
14.6.25.	IUGRC Session/ Thyroiditis, Multinodular goiter -II				Anti-thyroid Drugs (Mechanism of Action & Adverse Effects)				Hypothyroidism				Graves' disease, thyroiditis, comparison of hypo& hyper thiroidisim		Thyroid in Pregnancy		Surgical Intervention In thyroid Disease	
	Batch I-P		**BatchA-H**		**(odd) lec hall 4**		**(Even) lec hall 5**		**(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		Dr. iqbal		Dr Attiya		Dr. Zunera		Dr Hina Sattar AP		Dr Huma Asghar SR		Dr Nida		Dr Mujeeb		Dr Amna Abbasi	Dr. Farah Deeba	Dr Zafar Iqbal	Dr. Umer Qaiser

Rawalpindi Medical University Rawalpindi

Tentative Time Table 4th year Mbbs-Endocrinology Module 2025 (2nd week)

DATE / DAY	**8:00 AM – 9:00 AM**		**09:00am – 10:00am**		**BREAK 10:00AM – 10:30**	**10:30am – 12:00pm**	**12:00pm - 02:00pm**
Monday 16.6.25	**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)		Non-Communicable diseases, obesity, diabetes				
	lec hall 1 & 2	**lec hall 6 & Pharma lab**	**(odd) lec hall 1**	**(Even) lec hall 2**			
	Dr Attiya Dr Zoefeshan Dr Zaheer Dr Uzma Dr Ayesha	Dr Zunera Dr Saba Dr Memuna Dr Arsheen	Dr. Narjis Zaidi APMO	Dr. Affifa KalsoomAP			
Tuesday 17.6.25.	**PATHOLOGY (SGD)**		**PHARMACOLOGY (LGIS)**				
	Parathyroid Disorders		Drugs that Affect Bone Mineral Homeostasis				
	(odd) lec hall 1,3	**(Even) lec hall 2,toxi lab**	**(odd) lec hall 1**	**(Even) lec hall 2**			
	Dr Sara Dr Mehreen Fatima	Dr Kiran Fatima Dr Mudassira Zahid	Dr Attiya	Dr. Arsheen			

Wednesday 18.6.25	**PATHOLOGY (SGD)**				**SURGERY (LGIS)**							
	Pancreatic tumors				Surgical Intervention of Parathyroid Gland							
	(odd) lec hall 1,3		**(Even) lec hall 2,6**		**(odd) lec hall 1**		**(Even) lec hall 2**					
	Prof. shabih Dr Kiran Fatima		Dr Rabiya Dr Fatima Zahra		Dr Zafar Iqbal		Dr. Umar Qaiser					
Thursday 19.6.25.	**PATHOLOGY (LGIS)**				**PHARMACOLOGY (LGIS)**							
	Diabates Mellitus				Anti-Diabetic drugs (Classification)							
	(odd) lec hall 1		**(Even) lec hall 2**		**(odd) lec hall 1**		**(Even) lec hall 2**					
	Prof Mobeena		Dr Mudassira		Dr Zunera		Dr. uzma					
Friday 20.6.25.	**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		Diabetes Mellitus/DKA I	
	Batch A-H		**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**
	Dr Asif , Dr Mehwish		**Dr Nida**		Dr Zunera		Dr. uzma		Dr Nida	Dr. Mujeeb	Dr Hina Sattar AP	Dr. Sonia Fazal SR
Saturday SEMINAR DAY 21.6.25.	**08:00AM – 09:45AM**				**09:45AM – 10:30**				**10:30AM – 11:15AM**		**11:15AM – 11:45 AM**	**11:45AM – 12:30PM**	**12:30PM – 01:15PM**	**01:15PM – 02:00PM**
	SGD / Skill lab				**PHARMACOLOGY (LGIS)**				**GYNAE/OBS (LGIS)**		**BREAK**	**MEDICINE(LGIS)**	**PEDIATRICS (LGIS)**	**EYE (LGIS)**
	Community Medicine / Pathology Health programs/ Chronic Pancreatitis, Pancreatic Carcinoma				Oral Hypoglycemics				Diabetes in Pregnancy			Diabetes DKA I	Diabetes Mellitus management/DKA II	Complication of EYE in Diabetes Mellitus
	A-H		**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**	**(odd) lec hall 4**	**(Even) lec hall 5**
	Dr Asif , Dr Mehwish		**Dr Haider**		Dr Zunera		Dr. Uzma		Dr. saima khan	Dr Ammarah		Dr Nida	Dr Mujeeb	Dr Huma Asghar SR	Dr. Maria Shamsher	Dr Maria	Dr Misbah

Rawalpindi Medical University Rawalpindi

Tentative Time Table 4th year Mbbs-Endocrinology Module 2025 (3rd week)

DATE / DAY	**8:00 AM – 9:00 AM**		**09:00am – 10:00am**		**10:30am – 12:00pm**	**12:00pm - 02:00pm**
Monday 23.6.25.	**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.**	
	Epidemiology & Prevention of Non Communicable diseases (Cancers)		Drugs used in Diabetes (Clinical Pharmacology)			
	(odd) lec hall 1	**(Even) lec hall 2**	**lec hall 1 & 2**	**lec hall 6 & pharmacy lab**		

	Dr Imrana Saeed	Dr Narjis	Dr Asma Dr Zoefeshan Dr Zaheer Dr Uzma	Dr Zunera Dr Saba Dr Memuna Dr Arsheen Dr Ayesha	BREAK 10:00AM – 10:30						
Tuesday **24.6.25.**	**PATHOLOGY (SGD)**		**SURGERY (LGIS)**								
	Pancreatic tumors		**Surgical intervention of Pancreatic Tumors**								
	lec hall 1,3	**lec hall 2,toxi lab**	**(odd) lec hall 1**	**(Even) lec hall 2**							
	Prof. Mobina Dr Sara	Dr Mehreen Fatima Dr Mudasira Zahid	Dr Zafar Iqbal	Dr Umar Qaiser							
Wednesday **25.6.25.**	**PATHOLOGY (CBL)**		**PATHOLOGY (LGIS)**								
	Complications of Diabetes Mellitus		Adrenal Gland/Hyperadrenalism								
	lec hall 1,3	**lec hall 2,6**	**(odd) lec hall 1**	**(Even) lec hall 2**							
	DR Unaiza Dr Muddasira	Dr Aiysha, Dr Iqbal	Dr Rabiya Khalid	Dr.Fatimatu Zahra							
Thursday 26.6.25.	**MEDICINE (LGIS)**		**Surgery (LGIS)**								
	Hyperaldosteronism		Surgical intervention of Adrenal Gland								
	(odd) lec hall 1	**(Even) lec hall 2**	**(odd) lec hall 1**	**(Even) lec hall 2**							
	Dr Nida	Dr Mujeeb	Dr Zafar Iqbal	Dr Umar Qaiser							
Friday 27.6.25.	**08:00AM – 09:45AM**		**09:45AM – 10:30**		**10:30AM – 11:15AM**		**11:15AM – 12:00PM**				
	PAL/ skill lab		**MEDICINE (LGIS)**		**PATHOLOGY (LGIS)**		**PHARMACOLOGY(LGIS)**				
	Community medicine / Pharmacology		Cushing's Syndrome and addisson Disease		Hypoadrenalism and adrenal tumors		Corticosteroids (Classification)				
	IUGRC Session/P-Drug & Prescription writing										
	Batch A-H	**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	Dr Asma Dr Zoefeshan Dr Zaheer Dr Uzma	Dr Saima Ambreen	Dr Mujeeb	Dr. Kiran Fatima	Dr. Mudasira Zahid	Dr Attiya	Dr Zunera			
Saturday 28.6.25.	**08:00AM – 09:45AM**		**09:45AM – 10:30**		**10:30AM – 11:15AM**	BREAK	**11:45AM – 12:30PM**	**12:30PM – 01:15PM**		**01:15PM – 02:00PM**	
	PAL/skill lab COMMUNITY MEDICINE / PHARMACOLOGY		**PHARMACOLOGY (LGIS)**		**PHARMACOLOGY (CBL)**		**SURGERY (LGIS)**	**PATHOLOGY (CBL)**		**PHARMACOLOGY (SGD)**	
	IUGRC Session/P-Drug & Prescription writing		Corticosteroids (Mechanism of Action & Adverse effects)		Corticosteroids (Clinical Pharmacology)		Neuroendocrine Disorders	Pineal Gland Pathologies		Glucocorticoids Antagonist	
	I-P	**Batch A-H**	**(odd) lec hall 4**	**(Even) lec hall 5**	**lec hall 3 & 4**	**lec hall 5,6**	**(odd) lec hall 4**	**(Even) lec hall 5**	**(odd) lec hall 3,4**	**(Even) lec hall 5.6**	**lec hall 3 & 4**	**lec hall 5 & 6**

	All demonstrators& senior faculty	Dr Attiya Dr Saba Dr Memuna Dr Arsheen Dr Ayesha	Dr Attiya	Dr. Zunera	Dr Attiya Dr Zoefeshan Dr Zaheer Dr Uzma Dr Ayesha	Dr Zunera Dr Saba Dr Memuna Dr Arsheen		Dr. Rabia	Dr. Umar Qaiser	Prof. Mobina Dr Nida	Dr Abid Dr Faiza	Dr Asma Dr Zoefeshan Dr Zaheer Dr Uzma	Dr Attiya Dr Saba Dr Memuna Dr Arsheen Dr Ayesha

Rawalpindi Medical University Rawalpindi

Tentative Time Table 4th year Mbbs-Endocrinology Module 202 (4rth week)

DATE / DAY	8:00 AM – 9:00 AM		09:00am – 10:00am		BREAK 10:00AM – 10:30	10:30am – 12:00pm	12:00pm - 02:00pm
Monday 30.6.25.	PATHOLOGY (SGD)		COMMUNITY MEDICINE (LGIS)				res at the end of document
	Disorders of Adrenal medulla & MEN Syndrome		Health systems				
	lec hall 1,3	lec hall 2,6	(odd) lec hall 1	(Even) lec hall 2			
	Dr Mudassira Zahid Dr Fatima Zahra	Dr Rabiya Khalid Dr Mehreen Fatima	Dr Imran Younis	Dr Khola Noreen		CLINICAL CLERKSHIP of community medicine attached as annexu Community oriented clerkship and other rotations will remain s at end of yr.	
Tuesday 1.7.25	COMMUNITY MEDICINE (LGIS)		PHARMACOLOGY (SGD)				
	Healthcare delivery system of Pakistan		Mineralocorticoid Antagonist				
	(odd) lec hall 1	(odd) lec hall 1	lec hall 1 &2	lec hall 3, Toxi lab			
	Dr Imran Younis	Dr Mehwish Riaz	Dr Asma Dr Zoefeshan Dr Zaheer	Dr Zunera Dr Saba Dr Memuna			
			Dr Uzma ,drAyesha	Dr Arsheen			
Wednesday 2.7.25.	SDL/Prep Leave						

Thursday 3.7.25.	**Module Exam Community Medicine**
Friday 4.7.25.	**Module Exam Pathology**
Saturday 5.7.25.	**Module Exam Pharmacology**

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.

SCHEDULE OF IUGRC SESSION, 2024

Batch	Batch Incharge	Senior Faculty
A.	Dr Mehreen Noor	Dr Khola Noreen
B.	Dr Bushra Farooqi	Dr Sana Bilal
C.	Dr Maria Jabeen	Dr Afifa Kulsoom
D.	Dr Narjis Zaidi	Dr Mehwish Riaz
E.	Dr Asif Maqsood	Dr Asif Maqsood
F.	Dr Saba Maryum	Dr Farah Pervaiz
G.	Dr Imrana Saeed	Dr Sana Bilal
H.	Dr Mehrish Saleem.	Dr Mehwish Riaz
I.	Dr Mehjabeen Qureshi	Dr Sana Bilal
J.	Dr Mehreen Noor	Dr Mehwish Riaz
K.	Dr Maria Jabeen	Dr Khola Noreen
L.	Dr Ayesha Zujaja	Dr Asif Maqsood
M.	Dr Zaira Azhar	Dr AbdulQudoos
N.	Dr Bushra Farooqi	Dr Farah Pervaiz
O.	Dr Saba Maryum	Dr Rizwana Shahid
P.	Dr Mehrish Saleem	Dr Afifa Kulsoom

Community Oriented Clerkship Module (annex I)

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 Pr(Even)tive 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. O5 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			
1st 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.	• PPT based Demo on How to conduct & report HHS. • Guidelines on PHI work to be done during clinical rotations / ward duties	• Demonstration on n / lec Hall 3 • CHC - Dept. CM NTB RMU.	• 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)	• Construct a health message. (C6) • Prepare Health days commemoration stuff, Display material, PPT, (P) • Undertake a health survey. (HHS) (C3)
2nd 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)	• 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 in EPI visit reporting. Credit of HAW	• Explain cold chain component at EPI center • Vaccinate (EPI) vaccines to the clients. • Comprehend EPI system
3rd 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)	• 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 in EPI visit reporting. • Credit of HAW	• Identify CP devices available at MHC FP center • Counsel clients for use of a contraception method • Place CP devices to client (P)

4th 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	• Explain hospital waste disposal system • Develop a hospital waste management plan • Explains various domains of hospital management (C2)
5th 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	
6th 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		• 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	• Explain working of FLCF • Appreciate PHC elements at FLCF. (C2)
7th 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	

RAWALPINDI MEDICAL UNIVERSITY, RAWALPINDI

CLINICAL TRAINING ROTATIONS 4TH YEAR MBBS CLASS (SESSION 2021-2022)

STARTING w.e.f 24-02-2025 ENDING 16-11-2025.

In Continuation of this letter No. T-9/1101/RMU, RWP Dated: 22-02-2025

Date	Nephrology-HFH- / Dermatology-BBH	Urology BBH	Ortho-+ Trauma BBH	C.MED	E.N.T. H.F.H.	E.N.T B.B.H	E.N.T D.H.Q	PATHO	EYE H.F.H	EYE B.B.H	EYE DHQ	PEADS H.F.H	PEADS B.B.H.	Psychiatry BBH	Family Medicine-HFH / Psychiatry -BBH	NEUROSURGERY
24-02-25 To 09-03-25	A1 A2	B	C 1 C 2	D	E	F	G	H	I	J	K	L	M	N	O 1 O 2	P
10-03-25 to 23-03-25	B1 B2	C	D1 D2	E	F	G	H	I	J	K	L	N		O	P 1 P 2	A
24-03-25 To 20-04-25 Spring Vacation	C1 C2	D	E1 E2	F	G	H	I	J	K	L	M		O	P	A 1 A 2	B
21-04-25 To 11-05-25 student week	D1 D2	E	F1 F2	G	H	I	J	K	L	M	N	P		A	B 1 B 2	C
12-04-25	E1	F	G1	H	I	J	K	L	M	N	O		A	B	C 1	D

To 25-05-25	E2		G2											C 2	
26-05-25 To 08-06-25	F1 F2	G	H1 H2	I	J	K	L	M	N	O	P			D 1 D 2	E
09-06-25 To 13-07-25 Summer vacation	G1 G2	H	I1 I2	J	K	L	M	N	O	P	A	B		E 1 E 2	F
14-07-25 To 27-07-25	H1 H2	I	J1 J2	K	L	M	N	O	P	A	B		C	F 1 F2	G
28-07-25 To 10-08-25	I1 I2	J	K1 K2	L	M	N	O	P	A	B	C	D		G 1 G 2	H
11-08-25 To 24-08-25	J1 J2	K	L1 L2	M	N	O	P	A	B	C	D		E	H 1 H 2	I
25-08-25 To	K1 K2	L	M1 M2	N	O	P	A	B	C	D	E	F	G	I 1 I 2	J

07-09-25															
08-09-25 To 21-09-25	L1 L2	M	N1 N2	O	P	A	B	C	D	E	F	H		I	G 1 G 2	K
22-09-25 To 05-10-25	M1 M2	N	O1 O2	P	A	B	C	D	E	F	G		I	J	K 1 K 2	L
06-10-25 To 19-10-25	N1 N2	O	P1 P2	A	B	C	D	E	F	G	H	J		K	L 1 L 2	M
20-10-25 To 02-11-25	O1 O2	P	A1 A2	B	C	D	E	F	G	H	I		K	L	M 1 M 2	N
03-11-25 To 16-11-25	P1 P2	A	B1 B2	C	D	E	F	G	H	I	J	L		M	N 1 N 2	O
Date	Nephrology / Dermatology	Urology BBH	Ortho+ Trauma BBH	C.MED	E.N.T. H.F.H.	E.N.T B.B.H	E.N.T D.H.Q	PATHO	EYE H.F.H	EYE B.B.H	EYE DHQ	PEADS H.F.H	PEADS B.B.H.	Psychiatry BBH	Family Medicine-HFH / Psychiatry -BBH	NEUROSURGERY

Vice Chancellor

Rawalpindi Medical University

Rawalpindi

No.T-9/_____/RMU, RWP. Dated_____2025.

Copy to all concerned Departments. You are also informing to send revised lecture schedule.

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.