

# **STUDY GUIDE**

# **FINAL YEAR SURGERY**

**Module Name: Block A + B**

**Discipline: Surgery**

**Year: 2026**

**Academic Session: 2021-2026**

**Institution: Services Institute of Medical Sciences**

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## Introduction to Department of Surgery

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Welcome to the Department of Surgery. It gives us great pleasure to have you join the Final Year MBBS Surgical Clerkship, a crucial phase in your undergraduate medical training where theoretical knowledge is refined into practical clinical competence.

The Department of Surgery is a dynamic and academically vibrant unit dedicated to excellence in patient care, surgical training, and research. It is structured into four independent surgical units, each functioning as a cohesive clinical and teaching team. Every unit is headed by a Head of Unit, who is responsible for overseeing patient management, academic activities, and student supervision within their respective unit.

At the helm of the department is the Dean of Surgery, who provides overall leadership, ensures uniformity in teaching standards, and maintains academic and clinical excellence across all units.

Each surgical unit is further supported by a team of:

- Associate Professors, contributing to advanced teaching, clinical supervision, and research
- Assistant Professors, actively involved in bedside teaching, tutorials, and skill development
- Senior Registrars and Residents, who play a key role in day-to-day patient care and hands-on teaching

This hierarchical yet collaborative structure ensures that students receive comprehensive exposure to a wide spectrum of surgical conditions, while benefiting from close mentorship and continuous academic guidance.

During your rotation, you will be expected to actively participate in ward activities, outpatient clinics, operation theatre sessions, and emergency duties. The department encourages a culture of professionalism, ethical practice, critical thinking, and lifelong learning. This clerkship will not only enhance your clinical skills and surgical knowledge but also inspire confidence, discipline, and a commitment to excellence in your future medical career.

## Welcome Message

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It is my privilege to welcome you to the Department of Surgery for your Final Year MBBS clinical clerkship. This phase of your medical education represents a significant transition from the acquisition of theoretical knowledge to the development of practical clinical competence and professional responsibility.

The Department of Surgery is committed to maintaining the highest standards of patient care, undergraduate teaching, and academic excellence. The department is organized into four surgical units, each functioning under the leadership of a Head of Unit, and supported by a dedicated team of Associate Professors, Assistant Professors, and Senior Registrars. This structured framework ensures an effective learning environment, providing students with diverse clinical exposure and close academic supervision.

At the departmental level, coordinated oversight is maintained to ensure uniformity in teaching, assessment, and clinical training across all units. The emphasis is placed not only on the acquisition of surgical knowledge and technical skills but also on the cultivation of professionalism, ethical practice, communication skills, and patient-centered care.

During your rotation, you are expected to actively participate in all academic and clinical activities, including ward rounds, outpatient services, operative procedures, and emergency duties. Regular maintenance of your clinical logbook, adherence to institutional protocols, and demonstration of professional conduct are integral components of your training.

We encourage you to approach this clerkship with dedication, discipline, and a commitment to excellence. The experiences gained during this period will serve as a strong foundation for your future role as a safe, competent, and compassionate medical practitioner.

I wish you a productive and rewarding learning experience.

**Prof. Dr. M. Nadeem Aslam**  
Dean of Surgery  
Director Department of Medical Education  
Services Institute of Medical Sciences  
Services Hospital, Lahore

## Introduction to the Study Guide

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This study guide has been designed to provide a structured and comprehensive framework for final-year medical students preparing for their surgery examinations and clinical practice. It integrates core theoretical knowledge with practical clinical exposure, ensuring a balanced and outcome-oriented learning experience.

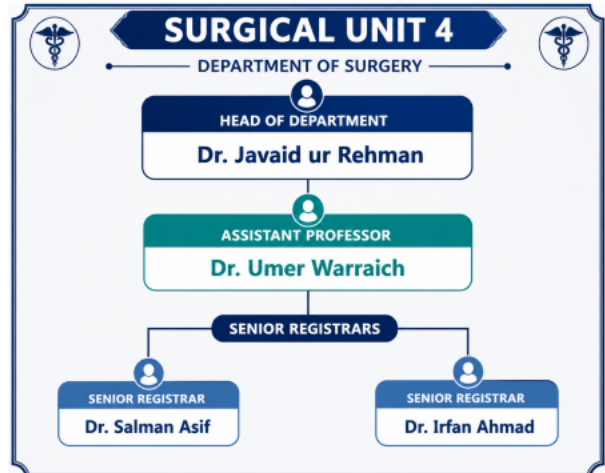
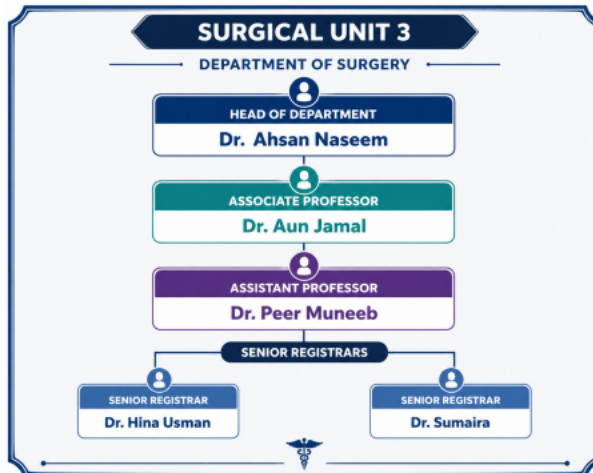
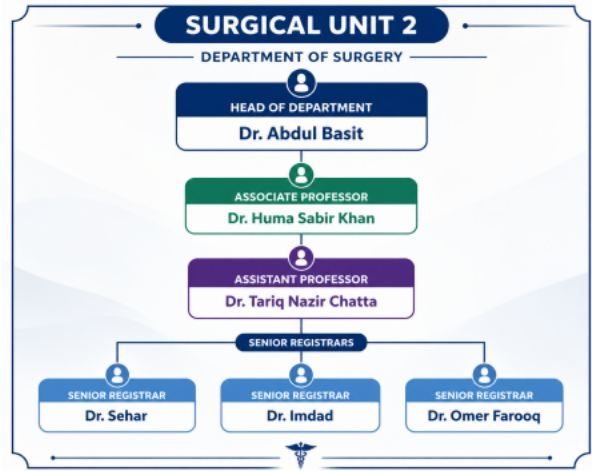
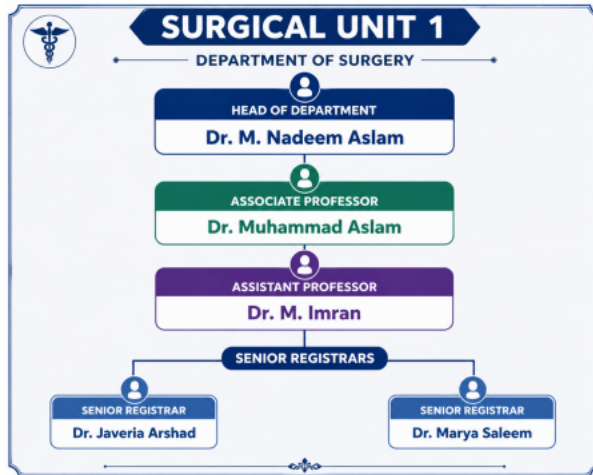
The program is organized into a total duration of **12 weeks**, comprising of **8 weeks of General Surgery clerkship rotation**, and **4 weeks of Allied Surgical clerkship rotation** along with **20 weeks of classroom-based teaching**. The classroom component focuses on building strong foundational concepts, covering essential surgical principles, common conditions, and evidence-based management approaches aligned with international standards.

The **General Surgery rotation** emphasizes hands-on clinical training, including patient assessment, ward work, operative exposure, and development of essential procedural and decision-making skills. This phase aims to bridge the gap between theoretical understanding and real-world surgical practice.

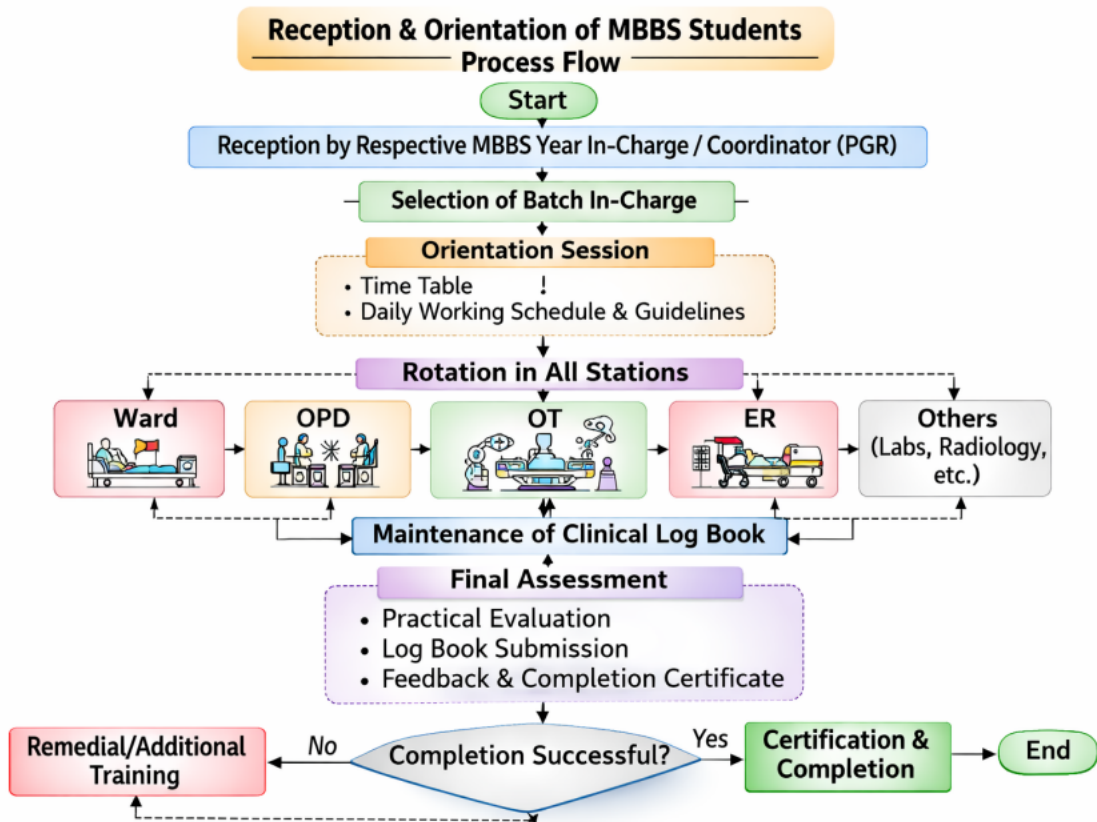
The **Allied Surgical rotation** spans **4 weeks**, with dedicated exposure to key specialties including **Orthopedics, Urology, Thoracic Surgery, and Pediatric Surgery**, with each specialty covered over one week. This segment broadens the student's perspective by introducing specialty-specific conditions, diagnostic approaches, and management strategies.

Overall, this study guide is intended to support systematic learning, enhance clinical competence, and prepare students for both professional examinations and safe surgical practice.

## Framework of Surgical Units

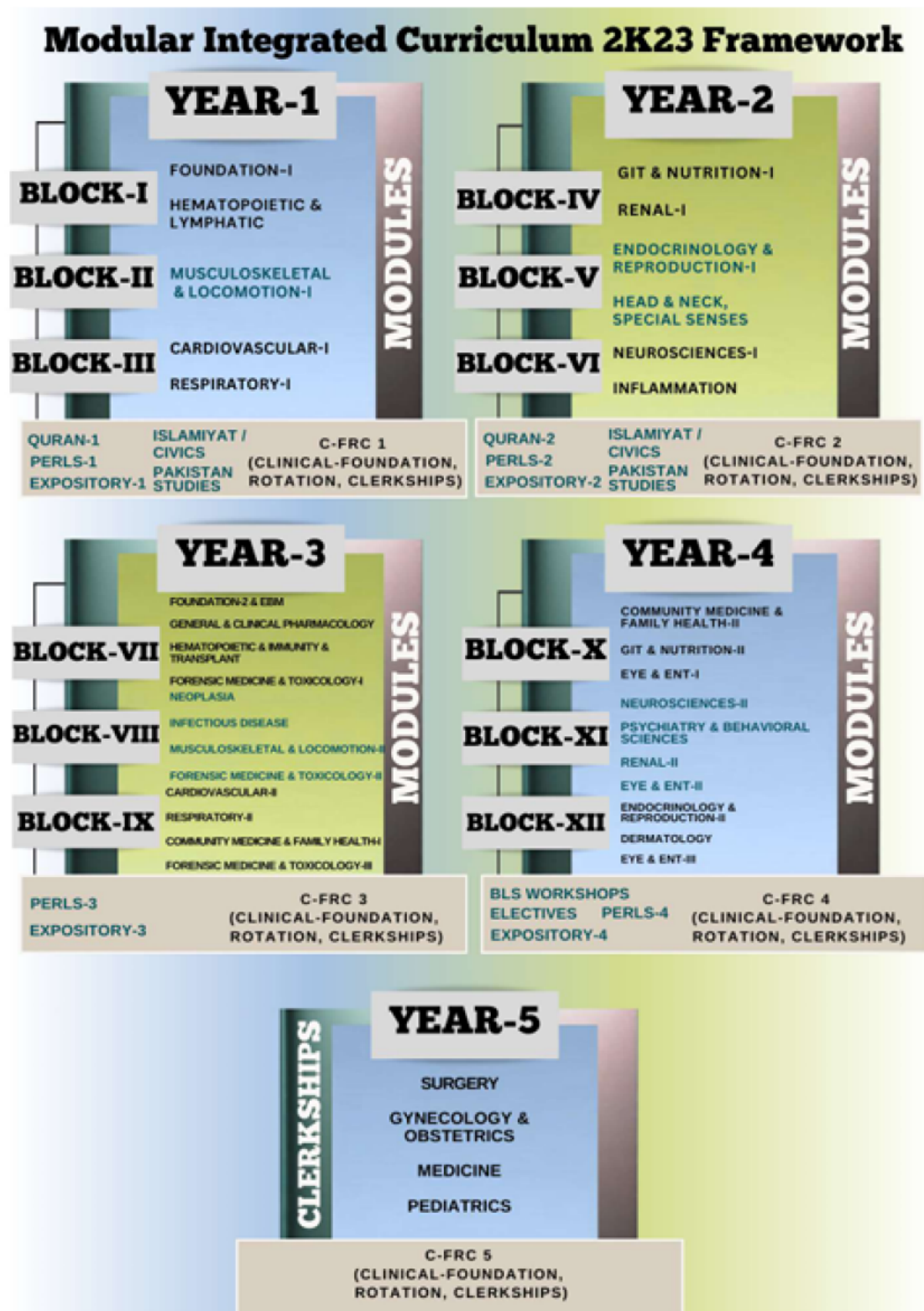


## Clinical Teaching



<b><i>BLOCK Surgery (20 weeks)</i></b>	
<b>Class Room Teaching (20 weeks)</b>	<b>Surgery &amp; Allied Clinical Rotation (12 weeks)</b>
	<b>General Surgical Rotation (8 weeks)</b>
	<b>Allied Surgical Rotation (4 weeks)</b> <ul style="list-style-type: none"> <li>• <b>Orthopedics (1 week)</b></li> <li>• <b>Urology (1 week)</b></li> <li>• <b>Paedriatric Surgery (1 week)</b></li> <li>• <b>Thoracic Surgery (1 week)</b></li> </ul>

## Curriculum Framework



## Introduction to Module

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The Final Year Surgical Module is a comprehensive and integrated component of the undergraduate medical curriculum, designed in accordance with the **Modular Integrated Curriculum (C2K23)** of the University of Health Sciences. It aims to equip students with essential surgical knowledge, clinical skills, and professional competencies required for safe and effective patient care.

This module spans a total of **20 weeks** and is structured to ensure a balanced combination of theoretical learning and clinical exposure. It includes **20 weeks of classroom-based teaching**, focusing on core surgical principles, disease processes, and evidence-based management strategies, along with **8 weeks of General Surgery clerkship and clinical rotation**, where students actively participate in ward activities, outpatient care, emergency management, and operative procedures, fostering hands-on learning and clinical decision-making.

In addition, the module incorporates **4 weeks of Allied Surgical clerkships**, providing focused exposure to key surgical specialties. Each week is dedicated to a specific discipline, including **Orthopedics, Urology, Thoracic Surgery, and Pediatric Surgery**, enabling students to develop a broader understanding of specialty-specific conditions and their management.

Consistent with the clerkship framework, students are expected to engage in structured clinical activities, maintain logbooks, and participate in continuous assessment throughout the rotation. The module emphasizes the integration of knowledge, skills, and attitudes to prepare students for final professional examinations as well as their future roles as competent and responsible medical practitioners.

# Time Tables

**SERVICES INSTITUTE OF MEDICAL SCIENCES**  
 Clerkship Schedule for Final Year 2026  
 Duration : 16 wks , From 09/02/2026 to 31/05/2026

**BLOCK A**

Wk	Full Dates (Mon - Sat)				Full Dates (Mon - Sat)			
	A1	A2	A3	A4	A1	A2	A3	A4
1	Med I	Med II	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II
2	Med I	Med II	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II
3	Med I	Med II	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II
4	Med I	Med II	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II
5	Med I	Med II	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II
6	Med I	Med II	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II
7	Gastroenterology	Dermatology	Neurology	Psychiatry	Gastroenterology	Dermatology	Neurology	Psychiatry
8	Psychiatry	Gastroenterology	Dermatology	Neurology	Psychiatry	Gastroenterology	Dermatology	Neurology
9	Neurology	Psychiatry	Gastroenterology	Dermatology	Neurology	Psychiatry	Gastroenterology	Dermatology
10	Dermatology	Neurology	Psychiatry	Gastroenterology	Dermatology	Neurology	Psychiatry	Gastroenterology
11	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
12	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
13	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
14	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
15	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
16	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
17	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
18	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
19	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
20	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
21	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
22	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
23	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
24	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
25	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
26	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
27	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
28	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
29	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II
30	Paeds I	Paeds II	Med I	Med II	Paeds I	Paeds II	Med I	Med II

**BLOCK B**

Wk	Full Dates (Mon - Sat)				Full Dates (Mon - Sat)			
	B1	B2	B3	B4	B1	B2	B3	B4
1	Surg I	Surg II	Gynae III	Gynae I	Surg I	Surg II	Gynae III	Gynae I
2	Surg I	Surg II	Gynae III	Gynae I	Surg I	Surg II	Gynae III	Gynae I
3	Surg I	Surg II	Gynae III	Gynae I	Surg I	Surg II	Gynae III	Gynae I
4	Surg I	Surg II	Gynae III	Gynae I	Surg I	Surg II	Gynae III	Gynae I
5	Surg I	Surg II	Gynae III	Gynae I	Surg I	Surg II	Gynae III	Gynae I
6	Surg I	Surg II	Gynae III	Gynae I	Surg I	Surg II	Gynae III	Gynae I
7	Orthopedics	Thoracic Surgery	Paediatric Surgery	Urology	Orthopedics	Thoracic Surgery	Paediatric Surgery	Urology
8	Urology	Orthopedics	Thoracic Surgery	Paediatric Surgery	Urology	Orthopedics	Thoracic Surgery	Paediatric Surgery
9	Paediatric Surgery	Urology	Orthopedics	Thoracic Surgery	Paediatric Surgery	Urology	Orthopedics	Thoracic Surgery
10	Thoracic Surgery	Paediatric Surgery	Urology	Orthopedics	Thoracic Surgery	Paediatric Surgery	Urology	Orthopedics
11	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
12	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
13	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
14	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
15	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
16	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
17	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
18	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
19	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
20	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
21	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
22	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
23	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
24	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
25	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
26	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
27	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
28	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
29	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II
30	Gynae I	Gynae II	Surg I	Surg II	Gynae I	Gynae II	Surg I	Surg II

**Important**  
 As per UHS, each student is required to undertake at least three full day rotations per week (from 8:00 am to 8:00 pm) in the relevant clinical de  
 It is mandatory for every student to bring a completed, duly signed, and stamped clinical logbook with end-rotation clinical examination results f  
 End Clinical rotation exam must be conducted at the end of the rotation.  
 Ward test results and attendances must be sent to relevant HODs  
 No Batch change or swap allowed at all

**SERVICES INSTITUTE OF MEDICAL SCIENCES**

Classroom Teaching Schedule for Final Year 2026

Duration : **20 wks**, From 09/02/2026 to 25/07/2026 **REVISED**

<b>Group B Roll Numbers only</b>					<b>Group A</b>				<b>Group B</b>			
Monday	<b>08:00 to 08:50</b>	<b>08:50 to 09:40</b>	<b>09:40 to 10:00</b>	<b>10:30 to 14:00</b>	1	31	61	91	120	156	189	218
	Surgery Unit IV	Obs. & Gynae Unit I	Break	Wards / SDL	2	32	62	92	121	157	190	219
Tuesday	<b>08:00 to 08:50</b>	<b>08:50 to 09:40</b>	<b>09:40 to 10:00</b>	<b>10:30 to 14:00</b>	4	33	63	93	122	158	191	220
	Surgery Unit II	Obs. & Gynae Unit II	Break	Wards / SDL	5	34	64	94	123	159	192	221
Wednesday	<b>08:00 to 08:50</b>	<b>08:50 to 09:40</b>	<b>09:40 to 10:00</b>	<b>10:30 to 14:00</b>	6	35	65	95	124	160	193	222
	Surgery Unit I	Surgical Allied	Break	Wards / SDL	7	36	66	96	126	161	194	223
Thursday	<b>08:00 to 08:50</b>	<b>08:50 to 09:40</b>	<b>09:40 to 10:00</b>	<b>10:30 to 14:00</b>	8	37	67	98	127	163	195	224
	Surgery Unit III	Surgical Allied	Break	Wards / SDL	9	38	68	99	128	164	196	225
Friday	<b>08:00 to 09:45</b>			<b>10:00 to 12:00</b>	10	39	69	100	129	165	197	226
	Wards / SDL			CPC / Wards	11	40	70	101	130	166	198	227
Saturday	<b>08:00 to 08:50</b>	<b>08:50 to 09:10</b>	<b>10:30 to 14:00</b>		12	41	71	102	131	167	199	228
	Obs. & Gynae Unit III	Break	Wards / SDL		13	42	73	103	132	169	200	229
<b>Group A Roll Numbers only</b>					14	44	74	104	133	170	201	230
Monday	<b>08:00 to 12:00</b>	<b>12:00 to 12:20</b>	<b>12:20 to 13:10</b>	<b>13:10 to 14:00</b>	15	45	75	105	134	171	202	231
	Wards / SDL	Break	Paediatrics Unit I	Medicine Unit II	16	46	76	106	136	172	203	232
Tuesday	<b>08:00 to 12:00</b>	<b>12:00 to 12:20</b>	<b>12:20 to 13:10</b>	<b>13:10 to 14:00</b>	17	47	77	107	137	174	204	233
	Wards / SDL	Break	Medicine Unit III	Paediatrics Unit II	18	48	78	108	138	175	205	239
Wednesday	<b>08:00 to 12:00</b>	<b>12:00 to 12:20</b>	<b>12:20 to 13:10</b>	<b>13:10 to 14:00</b>	19	49	79	109	139	176	206	240
	Wards / SDL	Break	Medicine Unit IV	Medicine Allied	20	50	80	110	141	177	207	242
Thursday	<b>08:00 to 12:00</b>	<b>12:00 to 12:20</b>	<b>12:20 to 13:10</b>	<b>13:10 to 14:00</b>	21	51	81	111	142	178	208	243
	Wards / SDL	Break	Medicine Unit I	Medicine Allied	22	52	82	112	143	179	209	245
Friday	<b>08:00 to 09:45</b>			<b>10:00 to 12:00</b>	23	53	83	113	144	180	210	246
	Wards / SDL			CPC / Wards	24	54	84	114	147	181	211	247
Saturday	<b>08:00 to 12:50</b>	<b>12:50 to 13:10</b>	<b>13:10 to 14:00</b>		25	55	85	115	149	182	212	248
	Wards / SDL	Break	Medicine Allied		26	56	86	116	150	184	213	249
					27	57	87	117	151	185	214	250
					28	58	88	118	152	186	215	251
					29	59	89	119	154	187	216	252
					30	60	90		155	188	217	253

**Important**

- 1 There shall be Internal Block theory examination at the end of sixteen wks
- 2 Dates of the Internal Block theory examination shall be notified later
- 3 UHS criteria for classroom attendances shall be strictly followed
- 4 CPC schedule shall be notified later.
- 5 Second Block Schedule shall be notified in due course.
- 6 Mandatory UHS Life saving workshops shall be notified later.
- 7 Students must follow the group allocation for lecture schedule strictly.
- 8 Remedial/Resit as per UHS policy.
- 9 Strictly follow groups as made. No change of groups allowed. Any change may result in

## Topic Distribution for Final Year MBBS 2026

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**Duration:** Duration of each block is 20 weeks with 20 weeks of Class Lectures, 8 weeks of Clinical General Surgical Clerkship and 4 weeks of Allied Surgical Clerkship 1 week for each of the Orthopaedics, Urology, Paediatrics Surgery and Thoracic Surgery.

<b>Surgical Unit I</b>	
<b>Preoperative Assessment of Surgical Patient</b>	
S1-001	Pre-operative evaluation
S1-002	Pre-operative investigations
S1-003	High-risk patient
S1-004	Optimization
S1-005	Consent for surgery
<b>Postoperative Care</b>	
S1-007	Immediate recovery care
S1-008	Postoperative complications
S1-009	Post-operative wound care
<b>Breast Surgery</b>	
S2-006	Surgical anatomy
S2-007	Triple assessment
S2-008	Benign breast diseases
S2-009	Malignant breast disease
S2-010	Nipple and areola diseases
<b>Anal, Perianal and Large Bowel</b>	
S2-033	Large intestinal Tumors
S2-037	Hemorrhoids
S2-038	Anal Fissure
S2-039	Fistula in ano
S2-040	Pilonidal sinus
S2-041	Anal Canal Tumors
<b>Hernia</b>	
S2-047	Hernia formation
S2-048	Inguinal hernia
S2-049	Femoral hernia
S2-050	Ventral hernia

<b>Surgical Unit II</b>	
<b>Nutrition, Fluid, Electrolyte and Acid Balance</b>	
S1-011	Malnutrition in surgical patients
S1-012	Nutritional assessment
S1-013	Nutritional support
S1-014	Fluid & electrolytes
S1-015	Perioperative fluid management
S1-016	Acid-base Balance
<b>Surgical Ethics &amp; Patient Safety</b>	
S1-049	Surgical Ethics
S1-050	Patient Safety
<b>Gastrointestinal Surgery</b>	
S2-018	Surgical Anatomy
S2-019	Esophageal obstruction
S2-020	Peptic Ulcers
S2-021	Gastric volvulus and perforation
S2-022	Gastric tumors
S2-023	Inflammatory bowel disease
S2-024	Tuberculosis
<b>Gallbladder and Bile Ducts</b>	
S2-064	Cholelithiasis
S2-065	Acute and Chronic cholecystitis
S2-066	Cholecystectomy
S2-067	Tumors of biliary tree
<b>Liver</b>	
S2-069	Liver Trauma
S2-070	Obstructive jaundice
S2-071	Liver abscess
S2-072	Hydatid disease
S2-073	Liver Malignancies
S2-074	Management Principles

<b>Surgical Unit III</b>	
<b>Shock, Hemorrhage and Wound</b>	
S1-018	Metabolic response to injury
S1-019	Shock
S1-020	Blood transfusion ((See Annexure-I))
S1-021	Wound management
S1-022	Compartment syndrome
<b>Principles of Laparoscopy And Robotic Surgery</b>	
S1-047	Minimally Invasive Surgery
<b>Head, Face and Neck Surgery</b>	
S2-001	Head injuries
S2-002	Diseases of oral cavity
S2-003	Salivary gland disorders
S2-004	Neck lumps
<b>Abdomen</b>	
S2-051	Peritonitis
S2-052	Intraperitoneal abscess
S2-053	Adehesions & torsion
<b>Pancreas</b>	
S2-056	Pancreatitis (acute and chronic)
S2-057	Pancreatic cancer
<b>Spleen</b>	
S2-059	Splenic trauma & rupture
S2-060	Splenomegaly & hypersplenism
S2-061	Neoplasms
S2-062	Splenectomy

<b>Surgical Unit IV</b>	
<b>Surgical Infections</b>	
S1-024	Risk factors and sources
S1-025	Surgical site infections (SSI)
S1-026	Specific wound infections
S1-027	Systemic infections
S1-028	Viral infections in surgery
S1-029	Hospital-acquired & tropical infections
S1-030	Prevention & treatment
<b>Vascular and Nerve Disorders</b>	
S1-052	Limb ischemia (acute and chronic)
S1-053	Gangrene
S1-054	Varicose veins
S1-055	Venous thromboembolism
S1-056	Peripheral nerve injuries
<b>Small bowel and Appendix</b>	
S2-025	Diverticula
S2-026	Intestinal Obstruction
S2-027	Stomas
S2-028	Fistulas
S2-029	Short Bowel Syndrome
S2-030	Small Intestinal Tumors
S2-031	Ulcerative Colitis
S2-032	Vascular lesions
S2-034	Acute and chronic Appendicitis
S2-035	Appendicular tumors
S2-036	Appendectomy

<b>Paediatrics Surgery</b>	
S1-058	<b>Cleft Lip</b>
	<ul style="list-style-type: none"> <li>• Describe cleft lip with embryological basis.</li> <li>• Enumerate clinical features.</li> <li>• Outline timing of repair and treatment plan</li> </ul>
S1-059	<b>Cleft Palate</b>
	<ul style="list-style-type: none"> <li>• Describe cleft palate with embryological basis.</li> <li>• Enumerate complications of non-treatment.</li> <li>• Outline management principles with referral for treatment to Pediatric Surgical Setting</li> </ul>
S1-060	<b>Clubfoot (Congenital Talipes Equinovarus)</b>
	<ul style="list-style-type: none"> <li>• Describe the clinical features.</li> <li>• Outline principles of management, including conservative and surgical options</li> <li>• Identify possible complications and importance of long-term follow-up</li> </ul>
S1-061	<b>Anorectal Malformation (ARM)</b>
	<ul style="list-style-type: none"> <li>• Identify the spectrum of anorectal anomalies with embryologic basis.</li> <li>• Identify associated anomalies in ARM.</li> <li>• Describe typical presentations such as absence of anal opening and failure to pass meconium.</li> <li>• Discuss principles of diagnosis, need for careful Perineal examination, and referral for surgical planning.</li> </ul>
S1-062	<b>Hirschsprung's Disease</b>
	<ul style="list-style-type: none"> <li>• Define Hirschsprung's disease as congenital aganglionosis of the bowel.</li> <li>• Explain pathophysiology and its functional effects leading to obstruction.</li> <li>• Enlist key clinical features.</li> <li>• Outline diagnostic investigations and treatment plan.</li> </ul>
S1-063	<b>Umbilical hernia, Umbilical anomalies, granuloma/adenoma</b>
	<ul style="list-style-type: none"> <li>• Differentiate umbilical hernia and granuloma / adenoma.</li> <li>• Describe etiology and natural history.</li> <li>• Enumerate clinical features.</li> <li>• Identify indications for surgical intervention.</li> </ul>
S1-064	<b>Gastroschisis and Omphalocele</b>
	<ul style="list-style-type: none"> <li>• Differentiate gastroschisis and omphalocele with embryological origin.</li> <li>• Enumerate clinical features.</li> <li>• Identify complications of mis/non treatment.</li> <li>• Outline steps of resuscitation.</li> </ul>
S1-065	<b>Intussusception and causes of Intestinal Obstruction</b>
	<ul style="list-style-type: none"> <li>• Define intussusception.</li> <li>• Classify types of intussusception and pathophysiology with common age group and etiology.</li> <li>• Describe the classical triad of symptoms.</li> <li>• Outline diagnostic methods and management plan.</li> </ul>
S1-066	<b>Infantile Hypertrophic pyloric stenosis</b>
	<ul style="list-style-type: none"> <li>• Describe etiopathogenesis of infantile hypertrophic pyloric stenosis.</li> <li>• Describe the classical clinical features.</li> <li>• Identify importance and correction of metabolic abnormalities.</li> <li>• Outline the management plan.</li> </ul>
S1-067	<b>Esophageal atresia and Tracheoesophageal fistula</b>
	<ul style="list-style-type: none"> <li>• Define esophageal atresia and tracheoesophageal fistula.</li> <li>• Classify types and pathophysiology of esophageal atresia.</li> <li>• Identify clinical features.</li> <li>• Outline management plan.</li> </ul>

<b>Orthopedics</b>	
Orthopedic and Trauma	
S2-076	Bone Fractures and Complications
	<ul style="list-style-type: none"> <li>Describe the types and classification of bone fractures.</li> <li>Explain the pathophysiology and healing of fractures.</li> <li>Discuss the clinical features, diagnosis, and complications of fractures.</li> <li>Explain basic principles of fracture management, including conservative and surgical approaches.</li> </ul>
S2-077	Injuries of Tendons and Bursae
	<ul style="list-style-type: none"> <li>Describe common tendon and bursal injuries.</li> <li>Explain their clinical presentation and evaluation.</li> <li>Discuss principles of management, including conservative and surgical treatment.</li> </ul>
S2-078	Arthritis
	<ul style="list-style-type: none"> <li>Describe the types of arthritis affecting joints.</li> <li>Explain clinical features, basic investigations, and radiological findings.</li> <li>Discuss principles of medical and surgical management of arthritis.</li> </ul>
S2-079	Spinal Trauma Spinal Deformities
	<ul style="list-style-type: none"> <li>Describe types and mechanisms of spinal injuries.</li> <li>Explain clinical features and neurological assessment.</li> <li>Discuss imaging modalities used in spinal trauma.</li> <li>Explain basic principles of management, including immobilization and surgery.</li> <li>Describe common spinal deformities (scoliosis, kyphosis, lordosis).</li> <li>Explain their clinical assessment and radiological evaluation.</li> <li>Discuss management options, including conservative and surgical approaches.</li> </ul>
S2-080	Bone and Cartilage Tumors, Spinal Tumors
	<ul style="list-style-type: none"> <li>Classify bone and cartilage tumors into benign and malignant.</li> <li>Describe clinical features and basic diagnostic approach.</li> <li>Discuss general principles of management and complications of bone and cartilage tumors.</li> <li>Classify spinal tumors.</li> <li>Describe clinical presentation and neurological signs.</li> <li>Explain diagnostic approach, including imaging.</li> <li>Discuss principles of management and potential complications.</li> </ul>

<b>Anesthesia</b>	
<b>Principles of Anesthesia and Analgesia</b>	
S1-032	General Anesthesia
	<ul style="list-style-type: none"> <li>Enlist the indications.</li> <li>Describe the phases of general anesthesia.</li> <li>Explain airway management during general anesthesia.</li> <li>Discuss principles of muscle relaxation and artificial ventilation during general anesthesia.</li> <li>Identify the causes of failure to awake after anesthesia.</li> <li>Discuss the complications with their management.</li> </ul>
S1-033	Regional Anesthesia
	<ul style="list-style-type: none"> <li>Classify the types of regional anesthesia with indications.</li> <li>Identify the contraindications to spinal/epidural anesthesia.</li> <li>Differential between spinal and epidural anesthesia.</li> <li>Describe complications and their management.</li> </ul>
S1-034	Pain Management
	<ul style="list-style-type: none"> <li>Identify the methods of acute pain relief.</li> <li>Enlist the causes of chronic pain.</li> <li>Describe principles of chronic pain management.</li> </ul>
S1-035	ICU Monitoring and Care
	<ul style="list-style-type: none"> <li>Discuss indications for ICU admission.</li> <li>Explain basic ICU monitoring.</li> <li>Describe principles of ICU care.</li> </ul>

<b>Forensic x 2</b>	
S1-051	Medico-Legal aspects (Integrate with Forensic Medicine)
S2-081	Medicolegal aspects of Trauma (Forensic)
S1-005	Consent for surgery (integrate with Forensic Medicine)

<b>Radiology x 4</b>	
<b>Principals of Radiology</b>	
S1-037	<b>Chest X-ray</b>
	<ul style="list-style-type: none"> <li>Identify normal chest anatomy and standard projections.</li> <li>Identify radiological features of pneumothorax, pneumonia, pleural effusion, cardiomegaly, pulmonary oedema, fractures, surgical emphysema, neoplastic disease, and chronic inflammatory conditions.</li> </ul>
S1-038	<b>Skull X-ray</b>
	<ul style="list-style-type: none"> <li>Identify normal skull anatomy and projections.</li> <li>Identify fractures, lytic and sclerotic lesions, calcifications, pituitary fossa abnormalities, and paranasal sinus pathology.</li> </ul>
S1-039	<b>Abdominal X-ray</b>
	<ul style="list-style-type: none"> <li>Identify normal abdominal anatomy and projections.</li> <li>Detect renal and urinary tract stones, gallstones, and other calcifications.</li> <li>Identify free gas under the diaphragm indicating perforation.</li> <li>Identify radiological signs of hepatomegaly and splenomegaly</li> </ul>
S1-040	<b>Spine X-ray</b>
	<ul style="list-style-type: none"> <li>Identify normal spinal anatomy and projections.</li> <li>Identify disc space reduction and vertebral collapse.</li> </ul>
S1-041	<b>Barium Studies</b>
	<ul style="list-style-type: none"> <li>Identify normal anatomy and projections on barium meal and double-contrast studies.</li> <li>Interpret radiological features of gastric outlet obstruction, filling defects, stomach masses, esophageal varices and strictures.</li> <li>Identify intussusception, colonic defects, malabsorption patterns, strictures, ulcerative colitis, and ulcers.</li> </ul>
S1-042	<b>Specialized Imaging</b>
	<ul style="list-style-type: none"> <li>Identify hydronephrosis and renal masses on Intravenous Urogram (IVU).</li> <li>Identify vesicoureteric reflux on Micturating Cystourethrogram (MCU).</li> <li>Identify gall bladder diseases and gallstones on Cholecystogram.</li> </ul>
S1-043	<b>Advanced Imaging</b>
	<ul style="list-style-type: none"> <li>Interpret basic echocardiography reports.</li> <li>Interpret basic CT scan reports relevant to common clinical conditions.</li> <li>Describe the basic principles of MRI and interpret simple MRI reports.</li> </ul>

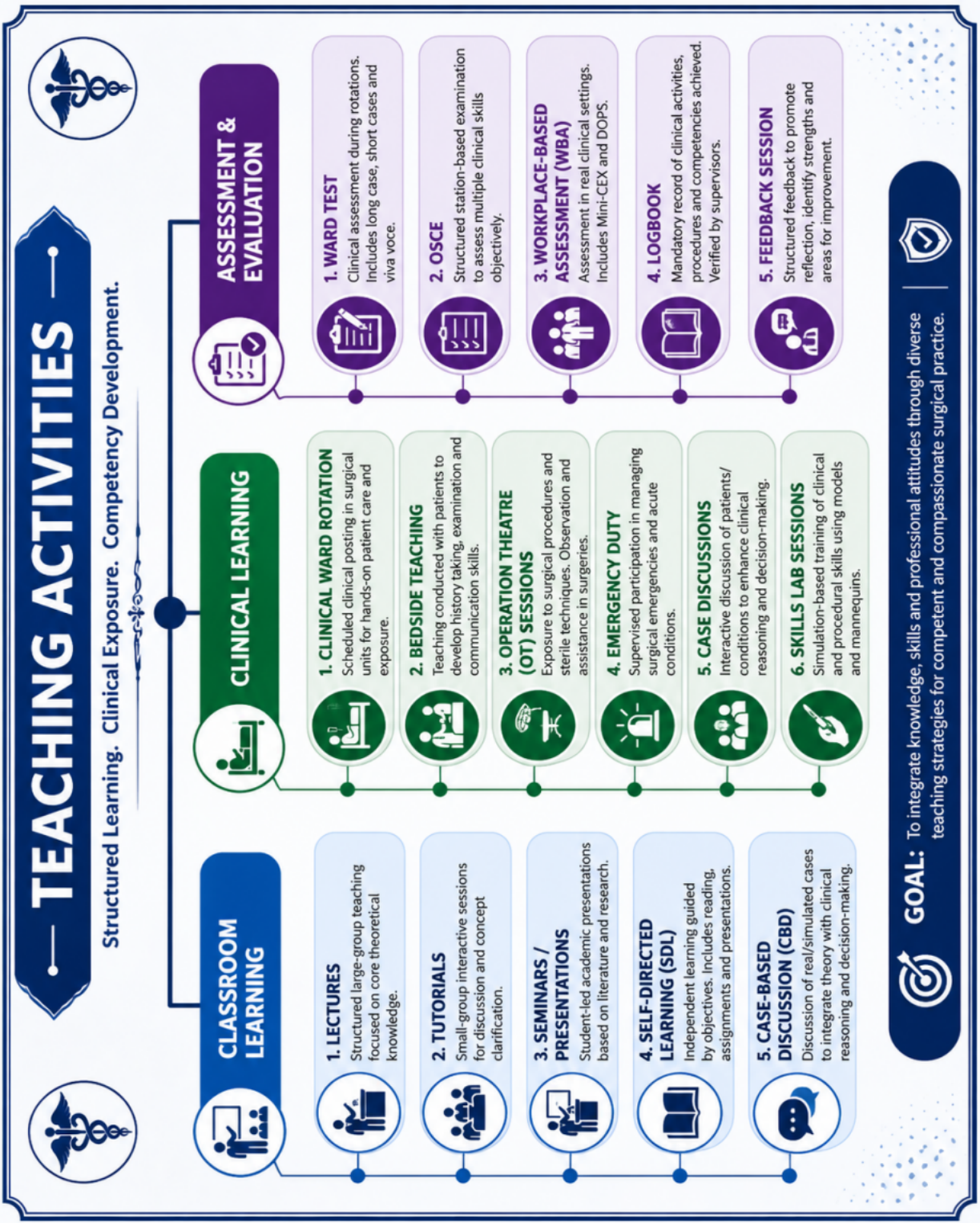
<b>Plastics &amp; Reconstructive Survey</b>	
Burn Injuries	
S1-044	<b>Assessment and Management of Burn Injuries</b>
	<ul style="list-style-type: none"> <li>• Define burn injury and classify burns according to cause and depth.</li> <li>• Describe the pathophysiology of burn injuries.</li> <li>• Explain assessment of burn patients, including severity and extent of burns.</li> <li>• Describe the Rule of Nines for estimation of total body surface area (TBSA) involved in burns.</li> <li>• Discuss initial management of burn injuries.</li> <li>• Explain principles of fluid resuscitation in burn patients.</li> <li>• Describe local wound management in burns.</li> <li>• Identify complications of burn injuries.</li> <li>• Explain basic principles of rehabilitation and prevention of burn injuries.</li> </ul>
Reconstructive and Plastic Surgery	
S1-046	<b>Basics of Plastic Surgery</b>
	<ul style="list-style-type: none"> <li>• Describe the basic anatomy and physiology of tissues used in reconstruction.</li> <li>• Explain principles of wound healing relevant to reconstructive surgery.</li> <li>• Describe the types of grafts used in surgery and discuss their clinical uses.</li> <li>• Explain the types of flaps used in reconstructive surgery and discuss their indications.</li> <li>• Discuss the role of plastic and reconstructive surgery in the management of difficult and complex tissue loss.</li> </ul>

<b>Urology</b>	
<b>Urogenital Conditions</b>	
S1-069	<b>Renal calculi</b>
	<ul style="list-style-type: none"> <li>• Identify causes and types of renal calculi.</li> <li>• Explain clinical features and sequelae.</li> <li>• Describe basic principles of diagnosis and management.</li> </ul>
S1-070	<b>Enlarged Prostate</b>
	<ul style="list-style-type: none"> <li>• Benign Prostatic Hyperplasia (BPH)</li> <li>• Describe benign prostatic hyperplasia and its pathophysiology.</li> <li>• Explain its clinical features and complications.</li> <li>• Describe investigations and basic principles of management.</li> <li>• Prostate Cancer</li> <li>• Describe prostate cancer and its risk factors.</li> <li>• Explain clinical features and staging of prostate cancer.</li> <li>• Describe investigations used in diagnosis of prostate cancer.</li> <li>• Discuss basic principles of management of prostate cancer.</li> </ul>
S1-071	<b>Scrotal and Testicular Swellings</b>
	<ul style="list-style-type: none"> <li>• Describe causes of scrotal and testicular swellings.</li> <li>• Explain clinical features and evaluation of scrotal and testicular swellings.</li> <li>• Describe basic principles of management of scrotal and testicular swellings.</li> </ul>
S1-072	<b>Bladder lesions</b>
	<p>Explain common bladder lesions, including cystitis, bladder stones, and bladder tumors.</p> <p>Discuss the clinical presentation of bladder diseases (e.g., hematuria, dysuria, urinary frequency).</p> <p>Explain the principles of diagnosis, including urine analysis, imaging, and cystoscopy.</p> <p>Discuss basic management principles of bladder conditions, including medical and surgical approaches.</p> <p>Identify potential complications of bladder diseases and their management.</p>

<b>Thoracic Surgery</b>	
Thoracic Diseases	
S2-012	<b>Surgical Anatomy</b>
	<ul style="list-style-type: none"> <li>Identify critical structures to preserve during thoracic surgery, such as the phrenic and vagus nerves, recurrent laryngeal nerves, major blood vessels, and the esophagus.</li> </ul>
S2-013	<b>Blunt and Penetrating Injuries</b>
	<ul style="list-style-type: none"> <li>Differentiate between blunt and penetrating injuries.</li> <li>Outline initial assessment and stabilization.</li> <li>Identify common complications and their basic management.</li> </ul>
S2-014	<b>Lung Abscess</b>
	<ul style="list-style-type: none"> <li>Enlist common causes and risk factors of lung abscess.</li> <li>Describe clinical features and basic diagnostic approach.</li> <li>Outline principles of medical and surgical management.</li> <li>Identify possible complications and their prevention</li> </ul>
S2-015	<b>Empyema Thoracis</b>
	<ul style="list-style-type: none"> <li>Enlist common causes and predisposing conditions of empyema.</li> <li>Describe clinical presentation and diagnostic methods.</li> <li>Outline principles of management, including drainage and supportive care.</li> <li>Enlist the complications.</li> </ul>
S2-016	<b>Lung Tumors</b>
	<ul style="list-style-type: none"> <li>Describe the clinical features, diagnostic evaluation, and general management of common benign thoracic tumors.</li> <li>Explain the staging, prognostic indicators, and treatment modalities for malignant thoracic tumors, including primary lung cancer and mediastinal masses.</li> <li>Outline the indications, operative techniques, and postoperative complications associated with lung- resection procedures.</li> </ul>

## Operational Definitions of Teaching Activities

Teaching Activity	Operational Definition	Key Features
<b>Lecture</b>	Structured large-group teaching session focusing on core theoretical knowledge.	45–60 min, audiovisual aids, teacher-centered
<b>Tutorial</b>	Small-group interactive session for discussion and clarification of concepts.	10–15 students, Q&A, problem-solving
<b>Case-Based Discussion (CBD)</b>	Discussion of real/simulated cases to integrate theory with clinical reasoning.	Patient-centered, decision-making focus
<b>Bedside Teaching</b>	Clinical teaching conducted in the presence of a patient.	History, examination, communication skills
<b>Clinical Ward Rotation</b>	Scheduled clinical posting in surgical units for hands-on exposure.	Ward rounds, procedures, logbook
<b>Operation Theatre (OT) Session</b>	Exposure to surgical procedures and sterile techniques.	Observation, assisting, asepsis learning
<b>Skills Lab Session</b>	Simulation-based training of clinical and procedural skills.	Models, mannequins, safe practice
<b>Self-Directed Learning (SDL)</b>	Independent learning guided by objectives.	Reading, assignments, presentations
<b>Workplace-Based Assessment (WBA)</b>	Assessment in real clinical settings.	Mini-CEX, DOPS
<b>Ward Test</b>	Clinical assessment conducted during rotations.	Long case, short cases, viva
<b>OSCE</b>	Structured station-based clinical examination.	Objective, standardized, multi-skill
<b>Logbook</b>	Record of clinical exposure and competencies achieved.	Mandatory, supervisor verified
<b>Seminar/Presentation</b>	Student-led academic presentation.	Research-based, interactive
<b>Emergency Duty</b>	Participation in emergency surgical care.	Acute cases, decision-making
<b>Feedback Session</b>	Structured performance review session.	Constructive, two-way



## Assessment

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**Assessment:** Assessment includes End of Clinical Ward Rotation Assessment (Ward Test), End of Block Assessment, Send Up Examination as per pattern of Final UHS Professional and Final UHS Professional Examination. Feedback is taken after each assessment from the students to improve the quality of education delivery.

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Sr. No.	Teaching Methodology	Assessment Methods		Exam Quality Assurance Procedure			System for appeal of Results	Feed Back
		Formative	Summative	Pre	Per	Post		
1	Large Group Teaching – Class lectures	<ul style="list-style-type: none"> <li>Class tests comprising of MCQs, SEQs and viva</li> <li>End-of-lecture quiz (DE)</li> </ul>	<ul style="list-style-type: none"> <li>End of Block Assessment</li> <li>Send-up examination on the pattern of Final Professional Examination                             <ul style="list-style-type: none"> <li>Final Professional Examination</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Development of varied question bank using multiple examiners</li> <li>Review of examination questions by faculty to keep them in accordance with Table of Specifications and difficulty index</li> <li>Maintain examination secrecy</li> </ul>	<ul style="list-style-type: none"> <li>Multiple versions of the same exam with changed order of questions to ensure transparency</li> <li>Punctuality and discipline ensured</li> <li>Written guidelines for students and examiners for transparent conduct of examinations</li> </ul>	<ul style="list-style-type: none"> <li>Standard Answer keys followed for marking to remove bias</li> <li>Large examiner panel assigned to promptly and effectively compile results</li> </ul>	Rechecking is carried out on submission of written request of concerned students.	<ul style="list-style-type: none"> <li>Post-exam difficulty analysis</li> <li>Discussion of difficult questions</li> <li>Student &amp; faculty feedback sessions</li> </ul>
2	Small Group Teaching: Clinical Ward Rotation	<ul style="list-style-type: none"> <li>Examination sessions during clinical rotation</li> <li>Ward tests comprising of OSPE, Short Case, Long Case</li> <li>Evening clinical classes to allow students to practice their clinical skills under senior PGR supervision</li> </ul>	<ul style="list-style-type: none"> <li>Ward Tests</li> <li>End of Block Assessment</li> <li>Final Professional Examination</li> </ul>	<ul style="list-style-type: none"> <li>Development of end-of-rotation ward tests aligned with Final Professional exam format (OSPE, Short Case, Long Case)</li> <li>Ensuring provision of a variety of clinical cases to provide proper exposure and experience</li> <li>Provision of an environment that</li> </ul>	<ul style="list-style-type: none"> <li>Punctuality, discipline, and appropriate dress code ensured during</li> <li>Multiple examiners present during ward tests to familiarize students with professional exam setting</li> </ul>	<ul style="list-style-type: none"> <li>Standard answer keys and structured checklists followed for marking to minimize bias</li> <li>Large examiner panel assigned to promptly and effectively compile results</li> </ul>	<ul style="list-style-type: none"> <li>Individual or group discussions for evaluation, feedback and addressing grievances a held after every clinical rotation session.</li> </ul>	<ul style="list-style-type: none"> <li>Scheduled session at the end of every clinical rotation to address and review problematic areas with students and faculty</li> <li>Repeated discussion of difficult examinations and topics</li> <li>Rotation in multiple surgical</li> </ul>

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3	Bed Side Teaching	<ul style="list-style-type: none"> <li>Case Presentation Round-based teaching session</li> </ul>	<ul style="list-style-type: none"> <li>Pre/Post Quiz</li> <li>Group Participation</li> <li>Ward Test</li> <li>Send-up</li> </ul>	<p>simulates Final Professional exam conditions exams</p> <p>Demonstration of proper clinical examinations, eliciting signs by senior teaching faculty</p>	<p>Assessment of history taking and examination skills of each student done on bedside sessions under supervision of a senior faculty member</p>	<ul style="list-style-type: none"> <li>Feedback taken from students</li> <li>Feedback session held to faculty held to review general mistakes</li> </ul> <p>* Review sessions to correct and explain any deficiencies on history taking and examination done at the end</p> <p>* Interactive question answer session to clear-up any confusing concepts</p>	<ul style="list-style-type: none"> <li>Feedback from students</li> </ul>	Interactive discussion	<p>Repeat sessions of deficient areas</p>	<p>wards providing opportunities to practice and improve on deficient clinical areas</p> <ul style="list-style-type: none"> <li>Interactive one-on-one session allow for real-time feedback by students and prompt response by senior faculty</li> </ul>
4	Peer-Assisted Learning	<ul style="list-style-type: none"> <li>Supervised minor OT duties</li> <li>Emergency duties</li> </ul>	<ul style="list-style-type: none"> <li>Ward tests</li> <li>OSPE</li> <li>Send ups</li> </ul>	<p>Planned rotation of all students in various surgical stations</p>	<p>Senior faculty and peers presence ensured to provide systemized training</p>	<p>Feedback from students</p>	<p>Feedback from students</p>	<p>Repeat sessions of deficient areas</p>	<p>Repeat sessions of deficient areas</p>	<p>Repeat sessions of deficient areas</p>
5	Workshops	<p>The following workshops are held for every clinical rotation during the year:</p> <ol style="list-style-type: none"> <li>BLS</li> <li>Surgical Skills</li> <li>Introduction to Surgical Instruments</li> </ol>	<p>Ward Tests</p> <p>Send-Ups</p>	<p>* Prescheduled roster of workshops for each batch</p> <ul style="list-style-type: none"> <li>Senior teaching faculty and assisting peers briefed about workshops</li> <li>Large team designated to</li> </ul>	<p>* Students divided into smaller groups to ensure uniformity of learning and practice</p> <ul style="list-style-type: none"> <li>Peer-assisted practice of skills by repeated demonstrations</li> </ul>	<p>* Review sessions to correct and explain any deficiencies</p> <ul style="list-style-type: none"> <li>Interactive question answer session to clear-up any</li> </ul>	<p>* Review sessions to correct and explain any deficiencies</p> <ul style="list-style-type: none"> <li>Interactive question answer session to clear-up any</li> </ul>	<p>* Feedback and review provided by supervising teaching faculty</p> <ul style="list-style-type: none"> <li>Interactive one-to-one sessions to alleviate student concerns</li> </ul>	<p>* Feedback and review provided by supervising teaching faculty</p> <ul style="list-style-type: none"> <li>Interactive one-to-one sessions to alleviate student concerns</li> </ul>	

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6	Self-Study	4: Gowning and Gloving Evening Sessions dedicated to self-study, review and discussion by senior teaching faculty and peers	* Viva Sessions * ward-tests * Send-Ups	improve individual learning of students * Pre-designed allotment of topics for self study according to surgical curriculum	and real time assessment * Interactive teaching session held by senior teaching faculty to discuss topic	confusing concepts Feedback form student and faculty	* At the time with senior teaching faculty member present	Interactive feedback session at the end involving faculty and students
7	Skill Demonstration	* History taking practice in OPD, Emergency and Ward * Clinical examination practice in OPD, Emergency and Ward	Pre/Post Session Quiz Ward tests	Structured teaching plan of every ward rotation regarding skill demonstration and practice formulated before-hand	* Ensure physical presence of faculty to address any problem	* Need for repeat practice sessions analyzed and scheduled		* Feedback and review provided by supervision teaching faculty * Interactive sessions to alleviate student concerns

SURGERY CLERKSHIP						
Theory			Clinical skills			Total Marks
Paper 1 MCQs	100 Marks	200 Marks	OSCE	10 stations x 5 marks= 50 marks	200 Marks	<b>400 Marks</b>
			OSVE	02 Stations x 10 marks= 20 marks		
Paper 2 MCQs	100 Marks		Short case	02 Short case x 30 marks = 60 marks		
			Long case	1 Long case x 70 marks = 70 marks		
Internal assessment (10%) Theory		50 marks	Internal assessment (10%) Practical		50 marks	<b>100 Marks</b>
<b>Total=500 Marks</b>						
<p><b>Theory Examination</b>            Paper 1 time duration will be 1hr 45mins.            Paper 2 time duration will be 1hr 45mins.</p> <p><b>Clinical Examination</b>            Time duration for each OSCE/OSVE station will be 06 minutes, short case will be 15 minutes and long case will be 30minutes.</p>						

### INTERNAL ASSESSMENT

It shall constitute 20% of the total assessment at the end of the academic year.

	Scoring Parameter	Weightage (percentage)
<b>Theory 10 %</b>	Attendance	75% attendance -1 % >85% attendance -2 %
	Block Exam	5 %
	Continuous assessment	3 %
<b>Practical 10 %</b>	Attendance	75% attendance -1 % >85% attendance -2 %
	Block Exam	5 %
	Clinical logbooks	3 %

## Aims & Goals



## Books and Reading Resources

Bailey & Love's short practice of surgery

Schwartz's Principles of Surgery

Fischer's Mastery of Surgery:

Essential Surgical Practice by Cuschieri