



# **KHYBER MEDICAL UNIVERSITY PESHAWAR**

## **SURGICAL TECHNOLOGY CURRICULUM**

**TOS Six Semester BS Surgical Technology**

**16 Weeks Activity Planner**

**2025**

**CENTRAL CURRICULUM & ASSESSMENT COMMITTEE FOR  
NURSING, REHABILITATION SCIENCES & ALLIED HEALTH SCIENCES**

## Team for TOS Development

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2	Mr. Kamran Akbar	Lecturer KMU I H S Hazara
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### Reviewed by

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<b>S.no</b>	<b>Subjects:</b>	<b>Credit Hours</b>
<b>1</b>	Clinical Operative General Surgery	<b>3(2+1)</b>
<b>2</b>	Clinical Operative Gynie and Obstrictic Surgery	<b>3(2+1)</b>
<b>3</b>	Clinical Operative Pedraitic surgery	<b>3(2+1)</b>
<b>4</b>	DIAGNOSTIC AND ENDOSCOPIC SURGERY	<b>3(2+1)</b>
<b>5</b>	CLINICAL OPERATIVE OPHTHALMIC SURGERY	<b>3(2+1)</b>
<b>6</b>	Peri Operative Surgery	<b>3(2+1)</b>

## Course Description

The Clinical Operative General surgery course is designed to provide BS Surgical Technology students with comprehensive knowledge and hands-on skills related to General surgery procedures. This course covers key aspects of General surgeries, including Breast Procedures, Oesophageal Procedures, Gastric, Intestinal, Pancreatic, Hepatobiliary and Colorectal Procedures. Students will learn preoperative, intraoperative, and postoperative techniques essential for assisting in different surgeries. Emphasis is placed on understanding surgical instruments, aseptic techniques, and the role of the surgical technologist in ensuring successful surgical outcomes. Additionally, the course promotes ethical considerations, patient care, and teamwork in the operating room to prepare students for real clinical settings.

## Learning Objectives

### Cognitive Domain

- After completion of this course the student will be able to:
- Describe the anatomy and physiology of the Abdominal Organs and its relevance to surgical procedures.
- Discuss indications, contraindications, and complications of common General Surgical surgeries.
- Discuss surgical techniques of common General surgeries.
- Describe the types and purposes of general surgical instruments and equipment.
- Explain the steps involved in preoperative and postoperative patient care in General surgery
- After completion of this course the student will be able to:
- Demonstrate proper handling surgical instruments.

### Psychomotor Domain

- Assist in preparing the surgical field and maintaining aseptic techniques during procedures.
- Perform basic suturing techniques and tissue handling under guidance.
- Handle ophthalmic Minimal Invasive tools such as Laparoscopes and forceps with precision.
- Prepare instruments and supplies for different General Surgical procedures following standardized protocols.

### Affective Domain

- After completion of this course the student will be able to:
- Demonstrate empathy and professionalism when interacting with patients undergoing General surgery.
- Respect the ethical considerations and cultural sensitivities surrounding General surgeries and donation practices.
- Recognize the significance of teamwork and effective communication in the surgical team.
- Comply to SOPs.

## Table of Specification

### Clinical Operative General Surgery

Weeks	Contents	Learning Outcome	Domain			MIT's	Time/Hours	Assessment	No of Items
			C	P	A				
<b>TOPIC: SURGICAL ANATOMY OF THE ABDOMINAL CAVITY</b>									
Week-1	Abdominal Wall Anatomy	Identify the layers and landmarks of the abdominal wall.	C1			Interactive Lecture/ SGD	2	MCQs	7
	Peritoneum	Describe the structure of the peritoneum.	C2						
	Innervation of the Abdominal Cavity	Explain the nerve supply of the Abdominal Structures	C2						
	Vascular Supply and Lymphatic Drainage	Explain the vascular and lymphatic anatomy of abdominal organs.	C3						
	Practical performance	Demonstrate surgical approaches to the abdominal cavity. <ol style="list-style-type: none"> <li>1. Anterior Incisions,</li> <li>2. Thoracoabdominal Incisions,</li> <li>3. Minimally Invasive Approaches</li> </ol>		P3		Demo	2	OSPE/OSCE	1
Inform Consent	Take Inform consent From the Patient			A1	Demo				
<b>TOPIC: SURGICAL PROCEDURES OF BREAST</b>									
Week-2	Anatomy	Describe Anatomy of Brest.	C2			Interactive Lecture/ SGD	2	MCQs	4
	Indication of Breast Surgeries	Recognize surgical positioning for Breast Surgeries.	C2						

	Diagnostic Procedures for Brest Pathologies	Explain diagnostic Procedures for Surgeries	C3			SGD			
	Types of Brest Procedures	Explain Brest Procedures <ol style="list-style-type: none"> <li>1. Lumpectomy,</li> <li>2. Mastectomy,</li> <li>3. Sentinel Lymph Node Biopsy,</li> <li>4. Lymphadenect</li> </ol>	C3			Interactive Lecture/ SGD			
	Practical performance	Perform proper draping techniques and patient positioning on the operating bed.		P4		Demo	2	OSPE/OSCE	1
	SOPs compliance	Show empathetic communication and attentiveness in creating a safe surgical environment.			A1	Role Play			

**TOPIC: SPECIALIZED INSTRUMENTS USED IN THE GENERAL SURGERY**

Week-3	Basic Surgical Instruments	Identify and classify basic surgical instruments.	C1			Interactive Lecture/ SGD	2	MCQs	7
	Specialized Instruments for Laparoscopic Surgery	Describe the use of laparoscopic instruments in surgery.	C2			Interactive Lecture/ SGD			
	Basic Surgical Instruments	Identify and classify basic surgical instruments.	C3			Task Based Learning			
	Practical performance	Demonstrate proper handling of sterilized supplies.		P2		Demo	2	OSPE/OSCE	1
	SOPs compliance	Adhere to aseptic techniques in the handling of Surgical instrumentation.			A4	Role Play			

**TOPIC : LIVER PROCEDURES**

Week-4	Anatomy of Liver	Discuss Liver Anatomy	C2				2	MCQs	4
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	Approaches	Describe Approaches and Incisions for Liver Surgeries (Laparoscopic and Open)	C2			Interactive Lecture/ SGD	2	OSPE/OSCE	0.5
	Procedures	Explain (Liver Resection, Liver Transplantation, Liver Shunt) Procedures	C3						
	Under Observation	Observe liver procedures under the supervision of consultant		P1		Demos			
	SOPs compliance	Comply to SOPs for Liver Procedures			A4	Demo			

**TOPIC: PANCREATIC SURGICAL PROCEDURES**

Week-5	Anatomy	Describe the Anatomy of Pancreas	C1			Interactive Lecture/ SGD	3	MCQs/SEQs	4
	Indication	Discuss the Indication of Pancreatic Surgical Procedures	C2						
	Surgical procures	Explain surgical Procedures of Pancreas. 1. Pancreaticoduodenectomy (Whipple Procedure) 2. Distal Pancreatectomy 3. Total Pancreatectomy	C3			Interactive Lecture/ SGD			
	Observation	Observe Pancreatic Procedures (Pancreatectomy, Distal Pancreatectomy, Pancreaticoduodenectomy)		P3		Demo	2	OSPE/OSCE	0.5
	SOPs compliance	Comply to SOPs for Pancreatic Procedures			A1	Role Play			

**TOPIC : GASTRIC PROCEDURES**

Week-6	Anatomy	Describe the surgical Anatomy of Stomach	C2			Interactive Lecture/ SGD	2	MCQs/SEQs	4
	Indication	Discuss the Indication of Surgical Procedure of Stomach	C2			Interactive Lecture/ SGD			
	Surgical procures	Explain the surgical procures of Stomach 1. Gastrectomy (Partial and Total)	C3			Interactive Lecture/ SGD			

		2. Gastric Bypass Surgery 3. Sleeve Gastrectomy 4. Gastroscopy							
Observation		Observe surgical procedures of the Gastric Surgeries (Gastrectomy, Gastric Bypass Surgery, Sleeve Gastrectomy, Gastroscopy)		P1		Demo	2	OSPE/OSCE	1
SOPs compliance		Comply SOPs for standard Gastric Surgeries.			A4	Role Play			

**TOPIC :SMALL INTESTINE PROCEDURES**

Week-7	Anatomy	Describe the surgical Anatomy of small intestine	C1			SGD	2	MCQs	4	
	Indication	Discuss the Indication of Surgical of small intestine	C2			Interactive Lecture/ SGD				
	Surgical procures	Explain the surgical procures of small intestine. 1. Small Bowel Resection 2. Ileostomy 3. Intestinal Bypass Surgery	C3							
	Observation		Observe surgical procedures of the small intestine (Small Bowel Resection, Ileostomy, Intestinal Bypass Surgery)		P1		Demo	2	OSPE/OSCE	1
	SOPs compliance		Comply SOPs for standard small intestine.			A1	Role Play			

**TOPIC : LARGE INTESTINE PROCEDURES**

Week-8	Anatomy	Describe the surgical Anatomy of Large intestine	C1			Interactive Lecture/ SGD	2	MCQs/SEQs	4
	Indication	Discuss the Indication of Surgical of large intestine	C2						
	Surgical procures	Explain the surgical procures of small intestine.	C3						



		<ol style="list-style-type: none"> <li>1. Large Bowel (Colon) Resection</li> <li>2. Colostomy</li> </ol>				Task based learning			
	Observation	Observe surgical procedures of the small intestine ( Colon Resection, colostomy)		P1		Demo	2	OSPE/OSCE	1
	SOPs compliance	Comply SOPs for standard large intestine surgical Procedures.			A4	Role Play			

**TOPIC : ANORECTAL PROCEDURES**

Week-9	Define	Describe surgical Anatomy of Anus and Rectum	C1			Interactive Lecture/ SGD	2	MCQs/SEQs	4
	Indication	Discuss the Indication of Anorectal procedures	C2						
	Surgical procures	Explain the Anorectal procedures. <ol style="list-style-type: none"> <li>1. Hemorrhoidectomy</li> <li>2. Anal Fistula Surgery</li> </ol>	C3						
	Observation	Observe Anorectal procedures (Hemorrhoidectomy, Anal Fistula Surgery)		P3		Demo	2	OSPE/OSCE	1
	SOPs compliance	Comply SOPs for standard Anorectal procedures.			A1	Role Play			

**TOPIC: BILIARY TRACT PROCEDURES**

Week-10	Anatomy	Describe the surgical Anatomy of Biliary tract	C1			Interactive Lecture/ SGD	2	MCQs/SEQs	4
	Indication	Discuss the Indication of Surgical Procedures of Biliary tract	C2						
	Surgical procures	Explain the surgical procures of Biliary tract. <ol style="list-style-type: none"> <li>1. Cholecystectomy (Laparoscopic and Open)</li> <li>2. Biliary Drainage</li> </ol>	C3						

		<b>3.</b> ERCP (Endoscopic Retrograde Cholangiopancreatography) <b>4.</b> Hepaticojejunostomy <b>5.</b> Choledochojejunostomy							
Observation	Observe surgical procedures of Biliary tract (Cholecystectomy (Laparoscopic and Open), Biliary Drainage, ERCP, Hepaticojejunostomy)		P3		Demo	2	OSPE/OSCE	1	
SOPs compliance	Comply SOPs for standard Biliary tract Procedures.			A4	Role Play				

**TOPIC: PILONIDAL CYSTS AND SINUSES PROCEDURES**

Week-11	Introduction	Describe the Pilonidal Cysts and sinuses	C1		Interactive Lecture/ SGD	2	MCQs/SEQs	4
	Indication	Discuss the Indication of Pilonidal Cysts and sinuses Excision Procedure	C2					
	Surgical procures	Describe the surgical procures of Pilonidal Cysts and sinuses.	C3					
	Observation	Observe surgical procedures of the Pilonidal Cysts and sinuses procedures		P3	Demo	2	OSPE/OSCE	1
	SOPs compliance	Comply SOPs for Pilonidal Cysts and sinuses procedures			A4			

**TOPIC: EXTREMITIES AMPUTATIONS PROCEDURES**

Week-12	Types	Describe Types of Extremities Amputations Procedures	C2		Interactive Lecture/ SGD	2	MCQs/SEQs	4
	Indication	Discuss the Indications of Extremities Amputations Procedures	C2					
	Surgical procures	Describe the surgical procures of Extremities Amputations <b>1.</b> Upper Extremity Amputation:	C3					

		2. Lower Extremity Amputation							
	Observation	Observe surgical procedures of upper and Lower Extremities Amputations		P3		Demo	2	OSPE/OSCE	0.5
	SOPs compliance	Comply SOPs for standard Extremities Amputations Procedures.			A4	Role Play			

**TOPIC: HERNIAL PROCEDURES**

Week-13	Definition	Describe Hernia	C2			Interactive Lecture/ SGD	2	MCQs/SEQs	4
	Types	Discuss Different Type of Hernias	C2						
	Correction	Explain surgical procures for Herniorrhaphies 1. Open Hernia Repair (Herniorrhaphy) 2. Laparoscopic Hernia Repair	C3			SGD			
	Observation	Observe surgical procures for Herniorrhaphy		P3		Demo	2	OSPE/OSCE	0.5
	SOPs compliance	Comply SOPs for standard surgical procures for Herniorrhaphy.			A4	Role Play			

**TOPIC: SPLEEN PROCEDURES**

Week-14	Anatomy	Describe the surgical Anatomy of Spleen	C2			Interactive Lecture/ SGD	2	MCQs/SEQs	4
	Indication	Discuss the Indication of Surgical Procedure of Spleen	C2						
	Surgical procures	Explain surgical procures of Spleen. 1. Splenectomy (Laparoscopic and Open) 2. Partial Splenectomy	C3						
	Observation	Observe surgical procedures of the Spleen ( splenectomy total and Partial )		P3		Demo	2	OSPE/OSCE	0.5

	SOPs compliance	Comply SOPs for standard Spleen Surgeries.			A1	Role Play			
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**TOPIC : ESOPHAGEAL PROCEDURES**

Week-15	Common Disease	Describe common esophageal Diseases	C2			Interactive Lecture/ SGD	2	MCQs/SEQs	4
	causes	Discuss causes of common esophageal Diseases	C2						
	Procedures	Describe the surgical procures common esophagus <ol style="list-style-type: none"> <li>1. Esophagectomy</li> <li>2. Esophagoscopy</li> <li>3. Esophageal Dilation</li> <li>4. Fundoplication</li> </ol>	C3						
	Observation	Observe surgical procedures of esophagus		P3		Demo	2	OSPE/OSCE/OSCE	1
	SOPs compliance	Comply SOPs for standard esophageal Procedures.			A1	Role Play			

**TOPIC : COMPLICATIONS OF ABDOMINAL SURGERY**

Week-16	Introduction	Enlist common Complications of abdominal Surgery	C1			Interactive Lecture/ SGD	2	MCQs/SEQs	4
	Types	Describe different Types Complications of abdominal Surgery	C2						
	Observation	Observe Steps Regarding Prevention of Complication of abdominal Surgery.		P3		Demo	2	OSPE/OSCE	0.5
	SOPs compliance	Comply SOPs for Prevention of Complications of abdominal Surgery.			A4	Role Play			

### Recommended Books:

1. Nancy Marie Phillips, 11<sup>th</sup> edition. Berry Kohn's Operating Room Technique.
2. Colleen J Rutherford, RN, CNOR Educator. Differentiating Surgical Equipment and supplies.
3. Maxine A. Gold Man, Room, 3<sup>rd</sup> Edition. Pocket guide to the Operating Room.

### ASSESSMENT BREAKDOWN

S.No	Topics	No of MCQ	No of OSPE / OSCE Stations	Static / Interactive
1	Anatomy of the GIT system	7	1	Static
2	Special Instruments	7	1	Static
3	Breast procedures,	4	1	Interactive
4	Gastric Procedures,	4	0.5	Static
5	Biliary tract procedures,	4	1	Interactive
6	Liver Procedures,	4	1	Static
7	Splenic procedures	4	0.5	Static
8	Pancreatic procedures.	4	1	Static
9	Esophageal procedures,	4	1	Interactive
10	Gastric Procedures,	4	1	Static
11	Small Intestine Procedures,	4	1	Static
12	Large Intestine Procedures	4	1	Interactive
13	Anorectal procedures	4	0.5	Static
14	Amputation	4	1	Static
15	Excision of Pilonidal Cysts and sinuses	4	0.5	Static
16	Complications of abdominal Surgery		1	Static

## SUR-611 Clinical Operative Gynecology Obstetrics 3(2+1)

### Course Description

This advanced course of **Clinical Operative Gynaecology Obstetrics** provides in-depth training in the clinical and surgical management of Gynecological and obstetric conditions and specializing in women's health. The program emphasizes both theoretical knowledge and practical skills required for the diagnosis, treatment, and management of common and complex cases in gynecology and obstetrics.

### Learning Objectives

#### Cognitive Domain

**By the end of this course, students should be able to**

1. Identify anatomical structures of the female reproductive system and normal physiological changes during pregnancy.
2. Understand the principles of preoperative care in gynecology for optimizing patient outcomes and reducing the risk of complications.
3. Analyze common gynaecological conditions and obstetric complications.
4. Differentiate between normal and abnormal findings in gynaecological and obstetrics conditions.
5. Perform systematic approach in preparing the patient both physically

#### Psychomotor Domain

and psychologically for surgery.

1. Accurately perform abdominal and pelvic examinations, including bimanual and speculum examinations.
2. Demonstrate proper hand hygiene and aseptic techniques before and after procedures.
3. Perform general examination (vitals, cardiovascular and respiratory systems) of the patient and focused pelvic examination to inspect for abnormalities.
4. Demonstrate correct positioning and draping of patients for different surgical procedures and to determine the risks related to specific gynecological procedure.
5. Perform basic gynecologic surgeries, such as dilatation and curettage (D&C) or laparoscopy, under guidance.

#### Affective Domain

**By the end of this course, students should be able to**

1. Develop empathy, compassion, cultural sensitivity, ethical considerations, and professional attitudes necessary for effective care of patients in this field.
2. Actively respond to the emotional and psychological needs of patients and supporting patients during sensitive discussions about reproductive health, infertility and pregnancy.
3. Show respect for cultural, religious, family-centered values that influence women's health and reproductive choices.
4. Demonstrate respect, patience, and sensitivity in all interactions.
5. Advocate for the rights and well-being of women, especially in contexts where access to gynecological care is limited or stigmatized.

# Table of Specification

Clinical Operative Gynecology Surgery

Weeks	Contents	Learning Outcome	Domain			MIT's	Time/Hours	Assessment	No of Items
			C	P	A				
<b>TOPIC: ANATOMY AND PHYSIOLOGY OF THE FEMALE REPRODUCTIVE SYSTEM</b>									
Week 1	Anatomy of the female reproductive system	Describe different structures of the female reproductive system.	C2			Interactive Lecture/SGD	2	MCQs	7
	Physiology of the female reproductive system	Discuss physiology of the female reproductive system.	C2						
	Practical performance	Identify the organs of the female reproductive system and muscles of the pelvic wall		P2		Demo	1	OSPE/OSCE	1
	SOPs compliance	Acknowledge the ethical and professional responsibility to apply knowledge of the Anatomy and Physiology of the Female reproductive system in clinical practice			A2	Role Play			
<b>TOPIC: SPECIAL FEATURES OF GYNECOLOGIC SURGERY</b>									
Week 2	Special features of gynecologic surgery	Discuss special features of gynecologic surgery.	C2			Interactive Lecture/SGD	2	MCQs	4
	Techniques	Discuss vaginal and abdominal approach for diagnostic and surgical procedures	C3						
	Under observation	Observe how to make different positions and different preparation, drapes, and setup for surgery.		P1		Demo	1	OSPE/OSCE	1
	SOPs compliance	Comply to SOPs while patient assessment and stringent adherence to aseptic techniques and surgical protocols.			A4	Role Play			
<b>TOPIC: CERVIX PROCEDURES</b>									
Week 3	Introduction	Discuss biopsy of the cervix.	C2				2	MCQs	4



	Types of biopsy	Describe types of biopsy obtained for cervix (excisional, incisional and cone biopsy)	C3			Interactive Lecture/SDG			
	Techniques	Discuss fractional curettage, colposcopy, culdocentesis and colpotomy.	C3						
	Under observation	Observe how to perform different diagnostic techniques under the supervision of the consultant.		P1		Demo	1	OSPE/OSCE	0.5
	SOPs compliance	Show commitment to precision and patient safety while practicing different diagnostic techniques.			A3	Role Play			

**TOPIC: PELVIC PROCEDURES**

Week 4	Fallopian tube procedures	Describe different fallopian tube procedures. (Tubal perfusion, tubal insufflation, hysterosalpingography)	C4			Interactive Lecture/SDG	2	MCQs	4
	Pelvic endoscopy	Discuss culdoscopy, hysteroscopy and laparoscopy of the pelvis.	C3						
	Under observation	Observe how to perform fallopian tube diagnostic procedures under the supervision of the consultant.		P1		Demo	1	OSPE/OSCE	
	SOPs compliance	Comply to SOPs while patient assessment and stringent adherence to aseptic techniques and surgical protocols.			A3	Role Play			

**TOPIC: VULVAR PROCEDURES**

Week 5	Pathology	Discuss diseases of the vulva.	C2			Interactive Lecture/SDG	2	MCQs	
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	Surgical procedures	Describe surgical procedures of the vulva. (Simple vulvectomy without node dissection, total vulvectomy and radical vulvectomy with bilateral inguinal-femoral lymphadenectomy)	C4						4
	Bartholin cyst	Discuss marsupialization of Bartholin cyst.	C2						
	Under observation	Observe how to perform different vulvar procedures under the supervision of the consultant.		P1		Demo	1	OSPE/OSCE	0.5
	SOPs compliance	Comply to SOPs while patient assessment and stringent adherence to aseptic techniques and surgical protocols.			A4	Role Play			

**TOPIC: VAGINAL PROCEDURES**

Week 6	Surgical procedures	Describe excision of a vaginal lesion, vaginectomy and vaginoplasty.	C3			Interactive Lecture/SDG	2	MCQs/SEQs	4
	Correction	Discuss procedures for repair of the pelvic outlet.	C2						
	Under observation	Observe to identify different conditions of the vagina under the supervision of the consultant.		P1		Demo	1	OSPE/OSCE	05
	SOPs compliance	Comply to SOPs while patient assessment and stringent adherence to aseptic techniques and surgical protocols.			A4	Role Play			

**TOPIC: PROCEDURES FOR GENITAL FISTULAS AND CERVIX**

	Definition	Define Genital fistulas.	C1			Interactive Lecture/SDG	2	MCQs/SEQs	4
	Procedures	Discuss procedures for repair of genital fistulas. (Vesicovaginal and rectovaginal fistula)	C3						

Week 7	Cervix procedures	Discuss procedures of the cervix. (Cauterization, trachelorrhaphy and trachelectomy)	C2				1	OSPE/OSCE	
	Under observation	Observe how to perform procedures for repair of genital fistulas and cervix under the supervision of the consultant.		P1		Demo			
	SOPs compliance	Embrace the ethical responsibility of following compliance SOPs, ensuring patient safety and team collaboration.			A4	Role Play			
<b>TOPIC: UTERUS PROCEDURES</b>									
Week 8	Uterus procedures	Discuss dilation and curettage and intrauterine thermal balloon ablation	C2			Interactive Lecture/SDG	2	MCQs/SEQs	
	Vaginal Hysterectomy Procedures	Illustrate radical vaginal and laparoscopic-assisted vaginal hysterectomy	C2						
	Under observation	Observe how to perform different vaginal procedures under the supervision of the consultant.		P1		Demo	1	OSPE/OSCE	
	SOPs compliance	Show commitment to precision and patient safety while practicing different vaginal procedures.			A4	Role Play			
<b>TOPIC: ABDOMINAL PROCEDURES</b>									
Week 9	Myomectomy	Discuss myomectomy procedures (Fibroid Embolization Through the Uterine Artery)	C2			Interactive Lecture/SDG	2	MCQs	5
	Abdominal hysterectomy	Explain different abdominal hysterectomy procedures (Total Abdominal Hysterectomy, Radical Wertheim Procedure and Salpingo-oophorectomy)	C4						

	Practical performance	Demonstrate how to perform inspection of pelvic and abdominal organs and lymph glands for biopsy or treatment		P4		Demo	1	OSPE/OSCE
	SOPs compliance	Embrace the ethical responsibility of following compliance SOPs, ensuring patient safety and team collaboration.			A3	Role Play		

**TOPIC: PELVIC EXENTERATION AND FALLOPIAN TUBE PROCEDURES**

Week 10	Introduction	Discuss Pelvic exenteration.	C3			Interactive Lecture/SDG	2	MCQs
	Fallopian tube procedures	Elaborate fallopian tube procedures.	C5					
	Under observation	Observe how to perform different abdominal procedures under the supervision of the consultant.		P1		Demo	1	OSPE/OSCE
	SOPs compliance	Comply to SOPs while patient assessment and stringent adherence to aseptic techniques and surgical protocols.			A4	Role Play		

**TOPIC: OVARIAN AND URINARY STRESS INCONTINENCE PROCEDURES**

Week 11	Ovarian procedures	Discuss ovarian procedures.	C2			Interactive Lecture/SDG	2	MCQs
	Urinary stress incontinence procedures	Illustrate urinary stress incontinence procedures (Marshall-Marchetti-Krantz Vesicourethral Suspension)	C2					
	Under observation	Observe how to perform different ovarian and urinary stress incontinence procedures under the supervision of the consultant.		P1		Demo	1	OSPE/OSCE

	SOPs compliance	Comply to SOPs while patient assessment and stringent adherence to aseptic techniques and surgical protocols.			A4	Role Play			
<b>TOPIC: PERIOPERATIVE OBSTETRICS</b>									
Week 12	Introduction	Explain Perioperative Obstetrics.	C3			Interactive Lecture/SDG	2	MCQs	5
	Considerations	Discuss considerations required for the care of the pregnant patient.	C3						
	Practical performance	Demonstrate how to make different position and different preparation, drapes, and setup.		P4		Demo	1	OSPE/OSCE	
	SOPs compliance	Adhere to SOPs for accurate and continuous monitoring to ensure patient safety.			A4	Role Play			
<b>TOPIC: THREATENED ABORTION, ABORTED AND ECTOPIC PREGNANCY</b>									
Week 13	Threatened abortion	Discuss Cerclage procedures (Shirodkar and McDonald procedure)	C3			Interactive Lecture/SDG	2	MCQs	2
	Aborted Pregnancy	Discuss aborted pregnancy and its procedures	C3						
	Ectopic Pregnancy	Describe ectopic pregnancy.	C2						
	Under observation	Observe how to perform different obstetrics procedures under the supervision of the consultant.		P1		Demo	1	OSPE/OSCE	
	SOPs compliance	Comply to SOPs while patient assessment and stringent adherence to aseptic techniques and surgical protocols.			A4	Role Play			
	Introduction	Discuss difficult vaginal delivery and placental problems.	C2				2	MCQs/SEQs	5
	Definition	Define Cesarean Birth.	C1						

Week 14	Explanation	Explain Cesarean Birth ( Setup, Incision and Delivery, Neonate care)	C4			Interactive Lecture/SDG			
	Under observation	Observe how to make setup and to perform cesarean delivery under the supervision of the consultant.		P1		Demo	1	OSPE/OSCE	4
	SOPs compliance	Adhere to SOPs for accurate and continuous monitoring to ensure patient safety.			A4	Role Play			
Week 15	Prenatal testing	Describe different prenatal testing procedures (Ultrasonography, Blood and Chorionic Villus Sampling, Amniocentesis and Fetoscopy)	C3			Interactive Lecture/SDG	2	MCQs/SEQs	5
	Intrauterine Fetal Surgery	Discuss Intrauterine Fetal Surgery.	C2						
	Under observation	Observe how to make setup and to perform different prenatal testing procedures under the supervision of the consultant.		P1		Demo	1	OSPE/OSCE	
	SOPs compliance	Comply to SOPs while patient assessment and stringent adherence to aseptic techniques and surgical protocols.			A4	Role Play			
<b>TOPIC: ASSISTED REPRODUCTION AND SPECIAL CONSIDERATIONS IN PREGNANCY</b>									
Week 16	Definition	Define assisted reproduction.	C1			Interactive Lecture/SDG	2	MCQs/SEQs	5
	Procedures	Explain different procedures of assisted reproduction (In Vitro Fertilization)	C4						
	Considerations	Illustrate anesthesia considerations in pregnancy.	C2						

	Intraoperative care	Discuss intraoperative care of the pregnant patient ( Intraoperative risks and Psychologic considerations)	C3						
	Practical performance	Demonstrate how to perform intraoperative care of the pregnant patient.		P3		Demo	1	OSPE/OSCE	2
	SOPs compliance	Communicate how to manage and prevent intraoperative risks.			A4	Role Play			

**Recommended Books:**

1. Nancy Marie Phillips, 11<sup>th</sup> edition. Berry Kohn's Operating Room Technique.
2. Colleen J Rutherford, RN, CNOR Educator. Differentiating Surgical Equipment and supplies.
3. Maxine A. Gold Man, Room, 3<sup>rd</sup> Edition. Pocket guide to the Operating Room.
4. Helen Bickerstaff and Louise C Kenny, 20th Edition. GYNAECOLOGY by Ten Teachers.

ASSESSMENT BREAKDOWN				
S.No	Topics	No of MCQ	No of OSPE/OSCE Stations	Static/ Interactive
1	Anatomy and physiology of the female reproductive system	4	1	Static
2	Gynecology history, examination and investigations	5	0.5	Interactive
3	General considerations of gynecological surgery	3	0.5	Interactive
4	Different diagnostic techniques and biopsy of the cervix	5	1	Static
5	Fallopian tube diagnostic procedures and pelvic endoscopy	6	1	Static
6	Vulvar Procedures	5	1	Static
7	Surgical procedures of the vagina, cervix and uterus	4	1	Static
8	Vaginal Hysterectomy	4	1	Static
9	Myomectomy, Pelvic exenteration and Abdominal hysterectomy	3	1	Static



10	Fallopian tube, Ovarian and Urinary stress incontinence procedures	5	1	Interactive
11	Perioperative Obstetrics, Considerations required for the care of the pregnant patient.	4	0.5	Interactive
12	Threatened abortion, Aborted and Ectopic Pregnancy	4	1	Static
13	Complicated Birth	5	0.5	Static
14	Assisted reproduction	4	1	Static
15	Anesthesia considerations in pregnancy, intraoperative care of the pregnant patient	4	1	Interactive
16	Subfertility	5	1	Static
<b>Total</b>	<b>16</b>	<b>70</b>	<b>14</b>	<b>14</b>

## Course Description

The **Clinical Operative Pediatric Surgery** course offers specialized knowledge and hands-on experience in surgical procedures unique to pediatric patients. It emphasizes the anatomical, physiological, and developmental differences in children that influence surgical decision-making and techniques. Learners will develop cognitive, psychomotor, and affective skills required to perform pediatric surgeries safely and compassionately, with a focus on patient-centered care and ethical practices.

## Learning Objectives

### Cognitive Domain Objectives

**By the end of this course, students should be able to**

6. Identify the key anatomical and physiological differences between pediatric and adult patients that impact surgical care.
7. Understand the principles of peri-operative care to pediatric patients, including preparation, positioning, and infection control.
8. Analyze the critical differences in surgical approaches used for congenital abnormalities, such as open surgery versus minimally invasive surgery.
9. Compare the post-operative care protocols for different pediatric surgeries, such as neonatal intestinal obstruction and Hirschsprung disease.
10. Assess the outcomes of pediatric surgical procedures using key performance indicators (KPIs) like infection rates, recovery time, and post-operative complications.

### Psychomotor Domain Objectives

**By the end of this course, students should be able to**

6. Recognize normal versus abnormal anatomical structures during pediatric surgery using endoscopic and laparoscopic views.
7. Demonstrate readiness to handle surgical instruments required for pediatric laparoscopic procedures.
8. Perform step-by-step basic pediatric surgical skills, such as hand-tied knots, simple suturing, and retraction, under supervision.
9. Demonstrate correct positioning and draping of pediatric patients for different surgical procedures.
10. Perform routine surgical procedures such as pediatric appendectomy and gastrostomy tube placement with minimal supervision.

### Affective Domain Objectives

**By the end of this course, students should be able to**

6. Recognize the importance of empathy and compassion in the care of pediatric surgical patients.
7. Actively respond to the emotional and psychological needs of pediatric patients and their families during pre-operative counseling.
8. Show respect for cultural, religious, and family-centered values in the surgical care of pediatric patients.
9. Demonstrate ethical and professional conduct when communicating surgical risks and complications to the families of pediatric patients.
10. Consistently advocate for patient-centered care, promoting the rights and dignity of pediatric patients during surgery.

## Table of Specification

### Clinical Operative Pediatric Surgery

S.no	Week	Contents	Objective	Domain			MIT's	Time/Hours	Assessment	No of Items
				C	P	A				
1	<b>TOPIC: INTRODUCTION TO PEDIATRIC SURGERY</b>									
2	Week-1	Definition	Define key terms related to pediatric surgery	C1			Interactive session/SGD	1	MCQS	2
		Indication	Discuss indication of pediatric surgery	C2				1		
3		Physical examination	Perform physical examination of pediatric surgical patient		P2		Demonstration		OSPE/OSCE	
4		Comply to SOPs	Comply to SOPs of physical examination			A3	Role play			
5	<b>TOPIC: FLUID AND ELECTROLYTE BALANCE</b>									
6	Week-1	Types of fluid	Describe fluid and electrolyte balance.	C2			Interactive session/SGD	2	MCQS	4
7		Importance of fluid and electrolytes balance in surgery	Identify different types of fluid infusions	C2						
8			Identify indications for monitoring and correcting fluid and electrolyte imbalances.	C3						
9		Practical performance	Prepare IV fluids and monitor blood loss intra-operatively.		P3		Demonstration		OSPE/OSCE	3
10		SOPs Compliance	Recognize the significance of fluid balance maintenance.			A3	Role play			
11	<b>TOPIC: BILIARY ATRESIA</b>									
12	Week-2	Definition	Define Biliary Atresia.	C1			Interactive session/SGD	2	MCQS	6
13		Types	Differentiate between types of Biliary Atresia.	C2						
14		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Biliary Atresia.	C3						

15		Indication	Identify indications of surgical intervention in Biliary Atresia.	C3						
16		Practical performance	Observe the surgical procedure for Biliary Atresia		P2		Demonstration		OSPE/OSCE	5
17		SOPs Compliance	Exhibit a positive attitude by consistently following compliance protocols			A2	Role play			
18	<b>TOPIC: INTUSSUSCEPTION</b>									
19	Week-3	Definition	Define Intussusception.	C1			Interactive session/SGD	2	MCQS	4
20		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Intussusception.	C3						
21		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Intussusception.	C3						
22		Indication	Identify indications for treatment of Intussusception.							
23		Practical performance	Demonstrate the procedure for treating Intussusception.		P4		Demonstration		OSPE/OSCE	4
24		SOPs Compliance	Follow the compliance SOPs for surgical procedures in role-play sessions.			A2	Role play			
25	<b>TOPIC: CONGENITAL ABDOMINAL WALL DEFECTS</b>									
26	Week-4	Definition	Define congenital abdominal wall defects	C3			Interactive session/SGD	2	MCQS	5
27		Types	Describe the types of congenital abdominal wall (Omphalocele, Gastroschisis)	C3						
28		Diagnosis	Evaluate the diagnostic imaging modalities used to identify congenital abdominal wall defects	C3						
29		Indication	Identify indications for surgical intervention in congenital abdominal wall defects.							
30		Practical performance	Demonstrate the surgical procedure for the repair of congenital abdominal wall defects		P4		Demonstration		OSPE/OSCE	5
31		SOPs Compliance	Exhibit a commitment to upholding compliance SOPs by adhering to aseptic techniques during surgical procedure			A3	Role play			
32	<b>TOPIC: BEZOARS</b>									

33	Week-5	Definition	Define bezoars.	C1			Interactive session/SGD	2	MCQS	5
34		Types	Differentiate between types of bezoars (phytobezoars, trichobezoars, Lactobezars and pharmacobezoars).	C2						
35		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Bezoars	C3						
36		Indication	Identify indications for treatment of bezoars.	C3						
37		Practical performance	Demonstrate the procedure for removing bezoars.		P4		Demonstration		OSPE/OSCE	4
38		SOPs Compliance	Appreciate the significance of patient and parent education on dietary habits to prevent bezoar formation			A3	Role play			
39		<b>TOPIC: IMPERFORATE ANUS</b>								
40	Week-6	Definition	Define Imperforate anus.	C1			Interactive session/SGD	2	MCQS	4
41		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Imperforate Anus	C3						
42		Indication	Identify indications for surgical intervention in Imperforate anus.	C3						
43		Practical performance	Observe the surgical procedure for correcting Imperforate anus.		P2		Demonstration		OSPE/OSCE	4
44		SOPs Compliance	Embrace the ethical responsibility of following compliance SOPs, ensuring patient safety and team collaboration.			A3	Role play			
45	<b>TOPIC: PECTUS DEFORMITIES</b>									
46	Week-7	Definition	Define Pectus deformities	C1			Interactive session/SGD	2	MCQS	6
47		Types	Identify different presentations of Pectus deformities.	C2						
48		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Pectus deformities	C3						
49		Indication	Identify indications for surgical intervention in Pectus deformities.	C3						

50		Practical performance	Demonstrate the surgical procedure for correcting Pectus deformities.		P4		Demonstration		OSPE/OSCE	6
51		SOPs Compliance	Advocate for comprehensive postoperative care and monitoring to ensure patient safety.			A3	Role play			
52	<b>TOPIC: ESOPHAGEAL ATRESIA</b>									
53	Week-8	Definition	Define Esophageal Atresia.	C1			Interactive session/SGD	2	MCQS	4
54		Diagnosis	Evaluate the diagnostic imaging modalities used to Esophageal Atresia	C2						
55		Types	Identify different types of Esophageal Atresia.	C3						
56		Indication	Identify indications for surgical intervention in Esophageal Atresia.	C3						
57		Practical performance	Demonstrate surgical procedure for correcting Esophageal atresia.		P4		Demonstration		OSPE/OSCE	5
58		SOPs Compliance	Embrace the ethical responsibility of following compliance SOPs, ensuring patient safety and team collaboration.			A3	Role play			
59	<b>TOPIC: EXTROPHY OF THE BLADDER</b>									
60	Week-9	Definition	Define Extrophy of the bladder.	C1			Interactive session	2	MCQS	5
61		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Extrophy of the Bladder	C3						
62		Indication	Identify indications for surgical intervention in Extrophy of the bladder.	C3						
63		Practical performance	Observe the surgical procedure for correcting Extrophy of the bladder.		P2		Demonstration		OSPE/OSCE	4
64		SOPs Compliance	Advocate for comprehensive preoperative and postoperative care to ensure patient safety.			A3	Role play			
65	<b>TOPIC: ORCHIDOPEXY</b>									
66	Week-10	Definition	Define Orchidopexy.	C1			Interactive session/SGD	2	MCQS	4
67		Types	Identify different techniques of Orchidopexy.	C2						
68		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Orchidopexy	C3						

69		Indication	Identify indications for Orchidopexy surgery.	C3						
70		Practical performance	Demonstrate the surgical procedure for Orchidopexy.		P4		Demonstration		OSPE/OSCE	4
71		SOPs Compliance	Advocate comprehensive preoperative and postoperative care to ensure patient safety.			A3	Role play			
72	<b>TOPIC: HYDROCELE</b>									
73	Week-11	Definition	Define Hydrocele.	C1			Interactive session/SGD	2	MCQS	3
74		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Hydrocele	C2						
75		Types	Identify different types of Hydroceles.	C3						
76		Indication	Identify indications for surgical intervention in Hydrocele.	C3						
77		Practical performance	Demonstrate the surgical procedure for Hydrocele.		P4		Demonstration		OSPE/OSCE	4
78		SOPs Compliance	Embrace the ethical responsibility of following compliance SOPs, ensuring patient safety and team collaboration.			A3	Role play			
79	<b>TOPIC: CIRCUMCISION</b>									
80	Week-12	Definition	Define Circumcision.	C1			Interactive session/SGD	2	MCQS	4
81		Types	Identify different techniques of Circumcision.	C2						
82		Indication	Identify indications for Circumcision.	C3						
83		Practical performance	Demonstrate the surgical procedure for Circumcision.		P4		Demonstration		OSPE/OSCE	4
84		SOPs Compliance	Advocate for proper pain management and postoperative care to ensure patient comfort and safety.			A3	Role play			
85	<b>TOPIC: HYDROCEPHALUS</b>									
86	Week-13	Definition	Define Hydrocephalus.	C1			Interactive session/SGD	2	MCQS	3
87		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Hydrocephalus	C3						
88		Indication	Identify indications for surgical intervention in Hydrocephalus.	C3						

89		Practical performance	Observe the surgical procedure for shunt placement in Hydrocephalus.		P4		Demonstration		OSPE/OSCE	4
90		SOPs Compliance	Exhibit a commitment to upholding compliance SOPs by adhering to aseptic techniques during surgical procedure			A3	Role play			
91	<b>TOPIC: ENCEPHALOCELE</b>									
92	Week-14	Definition	Define Encephalocele.	C1			Interactive session/SGD	2	MCQS	3
93		Types	Identify different types of Encephalocele.	C2						
94		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Encephalocele.	C3						
95		Indication	Identify indications for surgical intervention in Encephalocele.	C3						
96		Practical performance	Observe the surgical procedure for Encephalocele repair.		P4		Demonstration		OSPE/OSCE	4
97		SOPs Compliance	Advocate comprehensive preoperative and postoperative care to ensure patient safety.			A3	Role play			
98	<b>TOPIC: SCIOLIOSIS</b>									
99	Week-15	Definition	Define Scoliosis.	C1			Interactive session/SGD	2	MCQS	4
100		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Scoliosis	C3						
101		Indication	Identify indications for treatment of Scoliosis.	C3						
102		Practical performance	Demonstrate the surgical procedure for Scoliosis correction.		P4	1	Demonstration		OSPE/OSCE	6
103		SOPs Compliance	Exhibit a commitment to upholding compliance SOPs by adhering to aseptic techniques during surgical procedure			A3	Role play			
104	<b>TOPIC: CONGENITAL NEURAL TUBE DEFECTS</b>									
105	Week-16	Definition	Define Congenital Neural Tube defects	C1			Interactive session/SGD	2	MCQS	4
106		Types	Describe the types of Congenital Neural Tube (Spina Bifida and Myelomeningocele)	C3						
107		Diagnosis	Evaluate the diagnostic imaging modalities used to identify Congenital Neural Tube Defects	C3						



108	Indication	Identify indications for surgical intervention in Congenital Neural Tube Defects.	C3						
109	Practical performance	Demonstrate the surgical procedure for Congenital Neural Tube Defects.		P4		Demonstration		OSPE/OSCE	5
110	SOPs Compliance	Advocate comprehensive preoperative and postoperative care to ensure patient safety.			A3	Role play			

### Recommended Books:

1. Operative-pediatric-surgery-mark-davenport-lewis-spitz-arnold-coran
2. Pediatric Surgery (Springer Surgery Atlas Series)
3. Pediatric Surgery Diagnosis and Treatment by Christopher P. Coppola • Alfred P. Kennedy Jr. Ronald J. Scorpio
4. Pediatric and Congenital Cardiology, Cardiac Surgery and Intensive Care by Eduardo M. da Cruz • Dunbar Ivy James Jagers.

### ASSESSMENT BREAKDOWN

S.No	Topics	No of MCQ	No of OSPE / OSCE Stations	Static / Interactive
1	Introduction to pediatric surgery	2	0	Static
2	Fluid and Electrolyte Balance Considerations	4	1	Static
3	Biliary Atresia	6	1	Interactive
4	Intussusception	4	1	Static
5	congenital abdominal wall defects	5	1	Interactive
6	Bezoars	5	1	Static
7	Imperforate Anus	4	1	Static
8	Pectus deformities	6	1	Static
9	Esophageal Atresia	4	1	Interactive
10	Extrophy of the Bladder	5	1	Static
11	Orchidopexy	4	1	Static
12	Hydrocele	3		Interactive
13	Circumcision	4	1	Static
14	Hydrocephalus	3	1	Static
15	Encephalocele	3		Static
16	Scoliosis	4	1	Static
17	Congenital Neural Tube Defects	4	1	Static
<b>Total</b>		<b>70</b>	<b>14</b>	<b>14</b>

## Course Description

The Clinical Operative Ophthalmic Surgery course is designed to provide BS Surgical Technology students with comprehensive knowledge and hands-on skills related to ophthalmic surgical procedures. This course covers key aspects of eye surgeries, including lens implantation, retinal reattachment, corneal transplantation, and vitrectomy. Students will learn preoperative, intraoperative, and postoperative techniques essential for assisting in ophthalmic surgeries. Emphasis is placed on understanding surgical instruments, aseptic techniques, and the role of the surgical technologist in ensuring successful surgical outcomes. Additionally, the course promotes ethical considerations, patient care, and teamwork in the operating room to prepare students for real-world clinical settings.

## Learning Objectives

### Cognitive Domain

- After completion of this course the student will be able to:
- Describe the anatomy and physiology of the eye and its relevance to surgical procedures.
- Identify indications, contraindications, and complications of common ophthalmic surgeries.
- Discuss surgical techniques of common ophthalmic surgeries.
- Describe the types and purposes of ophthalmic surgical instruments and equipment.

### Psychomotor Domain

- After completion of this course the student will be able to:
- Demonstrate proper handling and sterilization of ophthalmic surgical instruments.
- Assist in preparing the surgical field and maintaining aseptic techniques during procedures.
- Perform basic suturing techniques and tissue handling under guidance.
- Handle ophthalmic surgical tools such as micro-scissors, forceps, and phacoemulsification probes with precision.
- Participate in the simulation of common ophthalmic surgeries, ensuring proper teamwork and communication.
- Prepare instruments and supplies for different ophthalmic procedures following standardized protocols.

### Affective Domain

After completion of this course the student will be able to:

- Value the importance of precision and meticulousness in ophthalmic surgical procedures.
- Demonstrate empathy and professionalism when interacting with patients undergoing eye surgery.
- Respect the ethical considerations and cultural sensitivities surrounding ophthalmic surgeries and donation practices.
- Recognize the significance of teamwork and effective communication in the surgical team.
- Appreciate the role of continuous learning and skill development in advancing ophthalmic surgical care.

## Table of Specification

### Clinical Operative Ophthalmic Surgery

Weeks	Contents	Learning Outcome	Domain			MIT's	Time/Hours	Assessment	No of Items
			C	P	A				
<b>TOPIC: EYE ANATOMY AND PHYSIOLOGY</b>									
Week-1	Introduction	Discuss Ophthalmic surgery, Eye, its accessory structures and tunics.	C1			Interactive Lecture	2	MCQs	4
	Anatomy and Physiology	Describe their structure and function.	C2						
	Refraction and Focusing	Explain how image are focus on retina.	C3						
	Practical performance	Demonstrate the structure, function and neuronal pathway of eye with the help of charts, models & videos.		P3		Demo	1	OSPE/OSCE	1
	Affecting Domain	<b>Acknowledge</b> the ethical and professional responsibility to apply knowledge of the eye's anatomy and physiology in clinical practice.			A1	Demo			
<b>TOPIC: OPHTHALMIC SURGICAL PATIENT CARE</b>									
Week-2	Perioperative care	Understand Perioperative care.	C1			Interactive Lecture	1	MCQs	4
	Surgical Positioning	Recognize surgical positioning for ophthalmic surgery.	C2						
	Intraoperative Management	Anticipate intraoperative challenges in ophthalmic surgery	C4			SGD	1	OSPE/OSCE	1
	Practical performance	Perform proper draping techniques and patient positioning on the operating bed.		P4		Demo			
	Affecting Domain	Show empathetic communication and attentiveness in creating a safe surgical environment.			A1	Role Play			
<b>TOPIC: SPECIAL FEATURES OF OPHTHALMIC SURGERY</b>									
Week-3	Special features	Explain the importance of precision and delicate handling in ophthalmic surgery.	C3			Interactive Lecture	1	MCQs	5
	Ophthalmic instrumentation.	Identify the unique features of ophthalmic instruments and equipment and their care.	C2			Task Based Learning	1		

	Practical performance	Demonstrate proper handling of ophthalmic instruments and medications.		P3		Demo	1	OSPE/OSCE	1
	Affecting Domain	Adhere to aseptic techniques in the handling of Ophthalmic instrumentation.			A4	Role Play			
<b>TOPIC: OPHTHALMIC MEDICATIONS AND ANESTHESIA</b>									
Week-4	Ophthalmic Medications	Differentiate between types of ophthalmic drugs and their applications.	C4			Interactive Lecture	2	MCQs	5
	Ophthalmic Anesthesia	Identify the types of anesthetic techniques and associated risks.	C2						
	Practical performance	Demonstrate proper handling and labeling of ophthalmic medications.		P3		Demo	OSPE/OSCE	0.5	
	Affecting Domain	Value ethical practices in labeling and handling ophthalmic solutions.			A3	Demo			
<b>TOPIC: EYELID PROCEDURES</b>									
Week-5	Anatomy and Physiology	Describe the Anatomy and Physiology of eyelid	C1			SGD	2	MCQs	5
	Common eyelid conditions	Differentiate between common eyelid conditions (chalazion, stye, ectropion, entropion).	C3				1		
	Surgical procures	Describe surgical techniques for neoplasm excision, ptosis correction, and blepharoplasty.	C2			Interactive Lecture			
	Practical performance	Observe the surgical procedures of the eyelid in clinicals and through videos.		P2		Demo	1	OSPE/OSCE	0.5
	Affecting domain	Appreciate the impact of cosmetic and functional outcomes on patient quality of life.			A1	Role Play			
<b>TOPIC: LACRIMAL APPARATUS, EXTRAOCULAR MUSCLES AND ORBIT</b>									
Week-6	Procedures of Lacrimal Apparatus	Describe the Anatomy and physiology of lacrimal apparatus.	C1			Interactive Lecture	1	MCQs	5
		Describe the surgical procures of lacrimal apparatus.	C2						
	Procedures of extraocular muscles and orbit	Describe the Anatomy and physiology extraocular muscles and orbit.	C1			Interactive Lecture	1		
		Describe the surgical procures of extraocular muscles and orbit.	C2						

	Practical performance	Observe the surgical procedures of the lacrimal apparatus, extraocular muscles and orbit in clinicals and through videos.		P2		Demo	1	OSPE/OSCE	1
	Affecting Domain	Comply SOPs for standard perioperative care.			A4	Role Play			
<b>TOPIC: SURGICAL REMOVAL OF THE EYE</b>									
Week-7	Indication of eye removal surgery	Understand the indications of eye removal.	C1			SGD	2	MCQs	4
	Surgical Removal of eye.	Describe surgical techniques for eye removal surgery.	C2			Interactive Lecture			
	Practical performance	Observe the surgical techniques for eye removal surgery in clinicals and through videos.		P2		Demo	1	OSPE/OSCE	1
	Affecting Domain	Show empathy to patients and adhere to sterile techniques.			A1	Role Play			
<b>TOPIC: CORNEAL PROCEDURES</b>									
Week-8	Corneal anatomy and related key terms	Discuss corneal anatomy and define key terms related to corneal conditions, including pterygium and keratoplasty.	C1			Interactive Lecture	1	MCQs	5
	Corneal repair techniques	Describe the processes and techniques of corneal transplantation and refractive keratoplasty.	C2						
	Cornea donation	Explain criteria for donor tissue selection and preservation methods.	C3			Task based learning	1		
	Practical performance	Demonstrate proper preparation of donor tissue for corneal transplantation.		P3		Demo	1	OSPE/OSCE	1
	Affecting Domain	Advocate for ethical practices in tissue procurement and transplantation.			A4	Role Play			
<b>TOPIC: PROCEDURES OF IRIS</b>									
Week-9	Introduction	Discuss the anatomy and physiology of iris and trabecular meshwork.	C1			Interactive Lecture	2	MCQs	5
	Glaucoma and its types	Describe Glaucoma, its types and identify techniques to diagnose glaucoma	C2						
	Surgical procedures	Describe the surgical techniques to repair glaucoma and iris prolapse.	C3						
	Practical performance	Observe the surgical procedures of glaucoma, iris prolapse in clinicals and through videos.		P2		Demo	1	OSPE/OSCE	1

	Affecting Domain	Show empathy to patients and adhere to sterile techniques.			A1	Role Play			
<b>TOPIC: CATARACT</b>									
Week-10	Introduction	Discuss anatomy and physiology of lens	C1			Interactive Lecture	2	MCQs	4
	Cataract	Describe Cataract and its types	C2						
	Surgical procedures	Describe surgical techniques for cataract	C2						
	Post-op rehabilitation	Discuss the post-operative rehabilitation of cataract extraction	C3			1	OSPE/OSCE	0.5	
	Practical performance	Observe the surgical procedures of cataract extractions in clinicals and through videos.		P2	Demo				
	Affecting Domain	Adhere to rehabilitative guidelines of cataract extraction			A4				Role Play
<b>TOPIC: LENS IMPLANTATION</b>									
Week-11	Introduction	Introduction to the lens implantation	C1			Interactive Lecture	2	MCQs	4
	Lens fixation types	Explain anterior and posterior chamber lenses	C2						
	Pros and Cons	Describe the pros and cons of lens transplantation	C1						
	Practical performance	Identify and specify different types of lasers.		P1	Demo	1	OSPE/OSCE	0.5	
	Affecting Domain	Recognize the importance of accuracy in lens power calculation and alignment.			A2				
<b>TOPIC: RETINOPATHIES</b>									
Week-12	Introduction	Discuss the anatomy and physiology of retina.	C1			Interactive Lecture	2	MCQs	4
	Retinal pathologies	Discuss retinal pathologies.	C2						
	Types of retinopathies	Describe retinal detachment, proliferative and non-proliferative retinopathies	C3						
	Practical performance	Demonstrate the function of retina and retinopathies through videos, simulations and charts.		P3	Demo	1	OSPE/OSCE	1	
	Affecting Domain	Acknowledge preoperative assessment of patient.			A4				Role Play
<b>TOPIC: SURGICAL PROCURES FOR REPAIR OF RETINAL DETACHMENT</b>									
Week-13	Surgical Interventions	Describe various surgical interventions for retinal reattachment, including diathermy, cryosurgery, intraocular tamponade and scleral buckling..	C2			Interactive Lecture	1	MCQs	4
	Laser Therapy & Photocoagulation	Explain the role of laser therapy and photocoagulation in managing retinal detachments.	C3			SGD	1		

	Practical performance	Observe the surgical techniques in clinicals and through videos.		P3		Demo	1	OSPE/OSCE	1
	Affecting Domain	Appreciate the impact of timely surgical intervention on visual outcomes.			A4	Role Play			
<b>TOPIC: VITRECTOMY</b>									
Week-14	Introduction	Define vitrectomy and its indications, including retinal detachment, vitreous hemorrhage, and macular holes.	C1			Interactive Lecture	2	MCQs	4
	Vitrectomy techniques and instruments.	Explain the surgical procedure of vitrectomy and the instruments used, such as vitretome.	C3						
	Methods	Differentiate between pars plana vitrectomy and limbal vitrectomy.	C4						
	Practical performance	Observe Vitrectomy procedures in clinicals and through videos.		P2		Demo	1	OSPE	1
	Affecting Domain	Appreciate the impact of vitrectomy on improving visual outcomes and quality of life for patients.			A1	Role Play			
<b>TOPIC: EYE INJURIES</b>									
Week-15	Introduction	Discuss eye injuries and their management.	C1			Interactive Lecture	2	MCQs	4
	Penetrating Injuries	Describe nonpenetrating injuries of eye.	C2						
	Nonpenetrating	Describe penetrating injuries of eye	C2						
	Practical performance	Compare different types of eye injuries.		P3		Demo	1	OSPE/OSCE	1
	Affecting Domain	Show empathy with patients of eye injuries			A1	Role Play			
<b>TOPIC: OPHTHALMIC LASER</b>									
Week-16	Introduction	Discuss ophthalmic laser	C1			Interactive Lecture	2	MCQs	4
	Laser types.	Describe different types of ophthalmic laser, their ranges and indications.	C2						
	Practical performance	Identify and Compare Ophthalmic lasers for different types of ophthalmic procedures.		P3		Demo	1	OSPE/OSCE	1
	Affecting Domain	Adhere to safe handling of laser equipment			A4	Role Play			



## Recommended Books:

1. Nancy Marie Phillips, 11th edition. Berry Kohn's Operating Room Technique.
2. 25th Edition. Bailey and Love's Short practice of surgery
3. Comuswhalan. Assisting at surgical operations, practical guide.
4. Maxine A. Gold Man, Room, 3rd Edition. Pocket guide to the Operating Room.
5. Colleen J Rutherford, RN, CNOR Educator. Differentiating Surgical Equipment and supplies

## ASSESSMENT BREAKDOWN

S.No	Topic	No of MCQs	OSPE/OSCE Stations	Interactive or Static
1	Eye Anatomy and Physiology	4	1	Static
2	Ophthalmic Surgical Patient Care	4	0.5	Static
3	SPECIAL FEATURES OF OPHTHALMIC SURGERY	5	0.5	Static
4	Ophthalmic Medications & Anaesthesia	5	1	Interactive
5	Eyelid Procedures	5	1	Static
6	Lacrimal Apparatus, Extraocular muscles and orbit	5	1	Static
7	Surgical Removal of the Eye	4	1	Static
8	Corneal procedures	5	1	Static
9	Iris Procedures	5	0.5	Static
10	Cataract	4	0.5	Static
11	Lens Implantation	4	1	Static
12	Retinopathies	4	1	static
13	Surgical Procures for Repair of Retinal Detachment	4	1	Static
14	Vitrectomy	4	1	static
15	Eye Injuries	4	1	Interactive
16	Ophthalmic laser	4	1	interactive
<b>Total</b>	<b>16</b>	<b>70</b>	<b>14</b>	<b>14</b>

## Course Description

This course introduces students to the fundamental diagnostic and endoscopic procedures commonly used in clinical practice. It covers techniques such as laparoscopy, ERCP, bronchoscopy, colonoscopy, and arthroscopy, emphasizing the purpose, equipment, and steps involved. Students will learn about patient care considerations, including preparation, safety, and comfort.

### Learning Objectives

## Cognitive Domain

After completion of this course the student will be able to:

- Define the purpose and indications of abdominal laparoscopy and other endoscopic procedures like colonoscopy and bronchoscopy.
- Describe the equipment used in procedures such as ERCP, cholangiography, and arthroscopy.
- Identify the differences between diagnostic and therapeutic endoscopic procedures.
- Explain the step-by-step process of performing a diagnostic procedure like gastroscopy, including patient preparation.
- Summarize the key considerations for patient care before, during, and after diagnostic procedures. Evaluate the role of biopsy in pathologic examination and its types.

## Psychomotor Domain

After completion of this course the student will be able to:

- Demonstrate proper preparation and setup for diagnostic procedures like cystoscopy and arthroscopy.
- Identify and handle endoscopic tools such as the bronchoscope and colonoscope under supervision.
- Assist in the sterilization and maintenance of equipment used in ERCP and other endoscopic procedures.
- Perform basic patient positioning techniques required for gastroscopy and laparoscopy.
- Prepare the necessary contrast media and equipment for diagnostic imaging procedures like cholangiography.

## Affective Domain

After completion of this course the student will be able to:

- Demonstrate respect for patient privacy and confidentiality during diagnostic and endoscopic procedures.
- Show empathy and compassion when explaining the procedure to patients, addressing their concerns, and minimizing anxiety.
- Acknowledge the importance of patient comfort during procedures like colonoscopy and sigmoidoscopy.
- Comply to SOPs for diagnostic tests like bronchoscopy and thoracoscopy and provide reassurance.
- Display professionalism in communication with patients and medical staff during diagnostic procedures.

## Table of Specification

### Diagnostic And Endoscopic Surgery

Weeks	Contents	Learning Outcome	Domain			MIT's	Time/Hours	Assessment	No of Items	
			C	P	A					
<b>TOPIC: INTRODUCTION TO ENDOSCOPY</b>										
Week-1	Define	Define endoscopy and minimal invasive surgery	C1			Interactive Lecture	2	MCQs	4	
		Differentiate between endoscopy and open surgery.	C2							
	Advantages and Disadvantages	Describe advantages and Limitation of endoscopic surgery	C2							
	Practical performance	Show Minimal invasive procedure and open surgical procedures through video demonstration.		P3		Demo	1	OSPE/OSCE		1
	SOPs compliance	<b>Acknowledge</b> the ethical and professional responsibility to apply knowledge.			A1	Demo				
<b>TOPIC: ELEMENTS OF ENDOSCOPIC SURGERY</b>										
Week-2	Introduction	Enlist elements of endoscopic surgery.	C1			Interactive Lecture	1	MCQs	4	
	Define	Define 8 elements of endoscopic surgery.	C2				1			
	Instruments and equipment	Discuss instruments and equipment used in endoscopic surgery.	C2							
	Practical performance	Demonstrate proper handling of Instruments and equipment used in endoscopy.		P4		Demo	1	OSPE/OSCE		1
	SOPs compliance	Adhere to aseptic techniques in the handling of endoscopic instruments instrumentation.			A4	Role Play				
<b>TOPIC: BIOPSY</b>										
Week-3	Define	Discuss Biopsies	C1			Interactive Lecture	1	MCQs	5	
	Types	Explain different types of biopsies for diagnostic purpose	C3			Task Based Learning	1			
	Practical performance	Demonstrate Proper Handling of Biopsy Sample.		P3		Demo	1	OSPE/OSCEplea		0.5
	SOPs compliance	Comply to SOPs Handling of Biopsy Sample.			A1	Role Play				
<b>TOPIC: ENDOSCOPIC PROCEDURES</b>										

Week-4	Define	Discuss laparoscopy, Explain esophagoscopy and gastroscopy	C3			Interactive Lecture	1	MCQs	5
	Procedure	Explain the procedure of Laparoscopy	C2						
	Indication and procedures	Discuss the indication of gastroscopy and Esophagoscopy and also explain the procedures.	C3			SGD	1		
	Practical performance	Demonstrate the correct technique for sterilizing the abdominal laparoscopy equipment.		P3		Demo	1	OSPE/OSCE	1
	SOPs compliance	Show empathetic communication and attentiveness in creating a safe surgical environment.			A3	Roleplay			
<b>TOPIC: ENDOSCOPIC PROCEDURES OF PANCREAS AND GALLBLADDER</b>									
Week-5	Indication	Discuss indication of choledocscopy procedure	C2			Interactive Lecture	1	MCQs	5
	Procedures	Explain in detail Endoscopic retrograde cholangiopancreatography procedure and also discuss Cholangiography	C3				1		
	Practical performance	Recognize the different steps in performing choledocscopy & ERCP and explain them.		P2		Demo	1	OSPE/OSCE	0.5
	SOPs compliance	Appreciate the impact of aseptic techniques in surgical procedures.			A1	Role Play			
<b>TOPIC: LOWER ABDOMEN ENDOSCOPIC PROCEDURES</b>									
Week-6	Indication	Explain the indication, procedure risks of colonoscopy	C3			Interactive Lecture	1	MCQs	5
	Types	Explain Sigmoidoscopy, indication and types of sigmoidoscope.	C3						
	Procedures	Explain Sigmoidoscopy, Discuss in detail diagnostic proctoscopy	C2			SGD	1		
	Practical performance	Label the components of a colonoscopy setup.		P1		Demo	1	OSPE/OSCE	0.5
	SOPs compliance	Recognize the importance of patient comfort during sigmoidoscopy preparation.			A1	Role Play			
<b>TOPIC: FUNDOPLICATION, GERD &amp; HIATAL HERNIA</b>									
Week-7	Indication	Describe Laparoscopic fundoplication and its indication	C2			Interactive Learning	1	MCQs	4
	Procedures	Briefly describe GERD and hiatal hernia.	C2			CBL	1		

	Practical performance	Understand the necessary tools used for laparoscopic fundoplication.		P1		Demo	1	OSPE/OSCE	1
	SOPs compliance	Demonstrate understanding of patient needs when explaining laparoscopic fundoplication.			A1	Role Play			
<b>TOPIC: ENDOSCOPIC PROCEDURES OF THORAX</b>									
Week-8	Types	Enlist the different types of endoscopic diagnostic procedures of the thorax and importance of these procedures.	C1			Interactive Lecture	2	MCQs	5
	Procedures	Discuss bronchoscopy in detail with preparation, indication, risks	C2						
	Practical performance	Recognize patient positioning techniques during Thoracic Procedures.		P2		Demo	1	OSPE/OSCE	1
	SOPs compliance	Advocate for ethical practices in minimal invasive procedures.			A4	Role Play			
<b>TOPIC: MEDIASTINOSCOPY AND THORACOSCOPY</b>									
Week-9	Define	Define and discuss indication of mediastinoscopy and thorascopy	C1			Interactive Lecture	2	MCQs	5
	Procedures	Explain in detail the procedures thoracoscopy and mediastinoscopy.	C3						
	Practical performance	Demonstrate proper handling of thoracoscopy equipment.		P3		Demo	1	OSPE/OSCE	1
	SOPs compliance	Show empathy to patients and adhere to sterile techniques.			A1	Role Play			
<b>TOPIC: ARTHROSCOPY &amp; ARTHROGRAPHY</b>									
Week 10	Indication	Discuss indication of arthroscopy and arthrography	C2			Interactive Lecture	2		4
	Procedures	Briefly explain the procedure of arthroscopy and arthrography.	C3						
	Practical performance	Identify the components of the arthroscopy setup and their functions.		P1		Demo	1	OSPE/OSCE	1
	SOPs compliance	Adhere to rehabilitative guidelines for arthroscopic procedures.			A4	Role Play			
<b>TOPIC: ENDOSCOPIC PROCEDURES OF KIDNEY AND URETER</b>									
Week-11	Define	Define Nephroscopy and Ureteroscopy.	C2			Interactive Lecture	2	MCQs	4
	Procedures	Discuss nephroscopy and ureteroscopy	C2						

	Practical performance	Recognize the steps in cystoscopy, including the required equipment.		P2		Demo	1	OSPE/OSCE	1
	SOPs compliance	Demonstrate understanding of patient privacy concerns while discussing cystoscopy.			A4				
<b>TOPIC: UROGENITAL PROCEDURES</b>									
Week-12	Define	Define Cystoscopy and Urethroscopy.	C3			Interactive Lecture	2	MCQs	4
	Procedures	Explain in detail the procedure of cystoscopy and urethroscopy.	C2						
	Practical performance	Identify the tools used in nephroscopy and describe their uses.		P1		Demo	1	OSPE/OSCE	1
	SOPs compliance	Acknowledge preoperative assessment of patient.			A4	Role Play			
<b>TOPIC: MAMMOGRAPHY &amp; MYELOGRAPHY</b>									
Week-13	Indication	Explain the Purpose and procedure of mammography	C3			Interactive Lecture	1	MCQs	4
	Procedure	Explain the purpose, procedure of myelography.	C3			SGD	1		
	Practical performance	Observe Mammography and myelography procures through video demonstrations.		P2		Demo	1	OSPE/OSCE	1
	SOPs compliance	<b>Appreciate</b> the impact of timely surgical intervention.			A4	Role Play			
<b>TOPIC: VENTRICULOGRAPHY</b>									
Week-14	Define	Explain Ventriculography.	C3			Interactive Lecture	2	MCQs	5
	Invasive VS Non-Invasive	Differentiate between invasive and non-invasive techniques	C4						
	Procedure	Discuss the purpose and procedure in detail.	C2						
	Practical performance	Observe Ventriculography procedures through video demonstrations.		P2		Demo	1	OSPE/OSCE	1
SOPs compliance	<b>Appreciate</b> the impact of Ventriculography in diagnosis.			A1	Role Play				
<b>TOPIC: UROGRAPHY, CYSTOGRAPHY &amp; CYSTOURETHROGRAPHY</b>									
Week-15	Differentiate	Differentiate between urography, cystography and Cystourethrography	C3			Interactive Lecture	2	MCQs	4
	Indication	Discuss the procedure of Cystography in detail	C2						
	Procedure	Explain urography and cystourethrography	C3						
	Practical performance	Observe Urography's and cystography		P2		Demo	1	OSPE/OSCE	0.5

	SOPs compliance	Show empathy with patients of Urogenital diseases.			A1	Role Play			
<b>TOPIC: ANGIOGRAPHY</b>									
Week-16	Define	Define Angiography.	C1			Interactive Lecture	2	MCQs	4
	Procedure	Describe the procedure of angiography in detail.	C2						
	Practical performance	Observe angiography procedure through video demonstrations.		P2		Demo	1	OSPE/OSCE	0.5
	SOPs compliance	<b>Adhere to</b> safe handling of radiations.			A4	Role Play			

**Recommended Books:**

1. Nancy Marie Phillips, 11th edition. Berry Kohn's Operating Room Technique.
2. Colleen J Rutherford, RN, Educator. Differentiating Surgical Equipment and supplies
3. Maxine A.GoldMan, Room, 3rd Edition. Pocket guide to the Operating Room.



## ASSESSMENT BREAKDOWN

S. No	Topics	No of MCQs	OSPE/OSCE Stations	Interactive or Static
1	Introduction to endoscopic surgery	4	1	Static
2	Elements of Endoscopic Surgery	4	1	Static
3	Biopsy	5	2	Static/Interactive
4	Endoscopic Procedures	5	1	Static
5	Endoscopic Procedures of Pancreas and Gallbladder	5	1	Static
6	Lower abdominal Endoscopic Procedures	5	1	Static
7	Fundoplication, GERD & Hiatal Hernia	4	2	Static/Interactive
8	Endoscopic Procedures of Thorax	5	1	Static
9	Mediastinoscopy and Thoracoscopy	5	2	Static /Interactive
10	Arthroscopy & Arthrography	4	1	Static
11	Endoscopic procedures of Kidney and Ureter	4	1	Static
12	Urogenital Procedures	4	1	Static
13	Mammography & Myelography	4	1	Interactive
14	Ventriculography	4	2	Static/Interactive
15	Urography, Cystography & Cystourethrography	4	1	Static
16	Angiography	4	1	Interactive
	<b>Total</b>	<b>70</b>	<b>14</b>	

## Course Description

The Perioperative Care course is designed to equip students with comprehensive knowledge and practical skills necessary for managing patients during the perioperative period. The course emphasizes preoperative assessment, intraoperative care principles, and postoperative management, with a focus on patient safety and multidisciplinary teamwork. Learners will develop expertise in cognitive, psychomotor, and affective domains, enabling them to deliver evidence-based and compassionate care across diverse surgical scenarios.

### Learning Objectives

## Cognitive Domain

**By the end of this course, students should be able to:**

1. Explain the principles of perioperative care, including patient assessment, preparation, and optimization.
2. Describe standard preoperative guidelines and protocols to minimize surgical risks.
3. Analyze the clinical significance of intraoperative monitoring and techniques such as aseptic measures and hemostasis.
4. Evaluate postoperative care strategies, including pain management, fluid and nutritional therapy, and mobilization protocols.
5. Understand the application of evidence-based practices to ensure patient safety and optimal recovery.

## Psychomotor Domain

**By the end of this course, students should be able to:**

1. Perform systematic physical examinations and focused medical histories for surgical patients.
2. Demonstrate skills in administering preoperative prophylaxis, positioning patients, and assisting in surgical procedures.
3. Apply protocols for immediate and long-term postoperative care, including wound management and mobilization exercises.
4. Operate relevant medical equipment for intraoperative monitoring under supervision.
5. Administer fluids and analgesics appropriately to manage hydration, pain, and recovery.

## Affective Domain

**By the end of this course, students should be able to:**

1. Appreciate the importance of empathy and respect in patient care during the perioperative period.
2. Actively contribute to multidisciplinary teams for enhanced patient outcomes.
3. Demonstrate ethical and professional behavior in communicating with patients and their families.
4. Value the role of cultural sensitivity and patient-centered care in the surgical setting.
5. Commit to lifelong learning and continuous improvement in perioperative practices.

**Table of Specification**  
**PERI OPERATIVE CARE**

Weeks	Contents	Learning Outcome	Domain			MIT's	Time/Hours	Assessment	No of Items
			C	P	A				
<b>TOPIC: PREOPERATIVE HISTORY</b>									
Week-1	Introduction	Define preoperative history and its purpose.	C1			Interactive Lecture	2	MCQs	4
	Components	Explain the components of preoperative history	C2						
	Identifying Red Flags	Analyze Red flags in preoperative assessments	C4						
	Practical performance	Conduct a simulated preoperative history-taking session.		P3		Demo	1	OSPE	1
	SOPs compliance	Adhere to SOPs for confidentiality and ethical standards in history-taking			A5	Role-Play Scenarios			
<b>TOPIC: PHYSICAL EXAMINATION</b>									
Week-2	Introduction	Define physical examination and its purpose in patient care	C1			Interactive Lecture/SGD	1	MCQs	5
	Types	Explain the principles and techniques of inspection, palpation, percussion, and auscultation in clinical practice.	C2						
	Normal vs. Abnormal Findings	Differentiate between normal and abnormal findings during a physical examination.	C4				1		
	Practical performance	Demonstrate basic physical examination techniques		P3		Demo	1	OSPE	1
	SOPs compliance	Follow SOPs to ensure ethical considerations and patient comfort in physical exams			A2	Demo			
<b>TOPIC: PREOPERATIVE INVESTIGATION- BLOOD TESTS</b>									
Week-3	Significance of Tests	Explain the significance of CBC, LFT's, RFT's and coagulation profile	C2			Interactive Lecture	1	MCQs	5
	Significance of Results	Interpret the results of preoperative blood tests	C3			Task Based Learning	1		
	Practical performance	Demonstrate the proper process of blood sample collection and handling.		P3		Demo	1	OSPE	1

	SOPs compliance	Adhere to SOPs for aseptic techniques and ethical practices in handling patient samples			A4	Role Play			
<b>TOPIC: PREOPERATIVE INVESTIGATION- CHEST X-RAY</b>									
Week-4	Introduction to Chest X-Ray	Describe the purpose of chest X-rays in diagnosis.	C1			Interactive Lecture/SGD	2	MCQs	5
	Basic Findings	Identify normal and abnormal findings	C2						
	Practical performance	Demonstrate proper handling and labeling of ophthalmic medications.		P3		Demo	OSPE	1	
	SOPs compliance	Follow SOPs for safe and ethical imaging practices.			A4	Role Play			
<b>TOPIC: PREOPERATIVE INVESTIGATIONS- BASICS OF ECG</b>									
Week-5	Basic Patterns	Identify normal ECG patterns and abnormalities	C2			Interactive Lecture/SGD	1	MCQs/SEQs	5
	ECG Interpretation	Interpret ECG findings for common conditions	C3				1		
	Practical performance	Demonstrate lead placement and ECG reading.		P3		Demo	OSPE	1	
	SOPs compliance	Follow SOPs for patient comfort and ethical ECG use.			A4	Role Play			
<b>TOPIC: PREOPERATIVE OPTIMIZATION OF MEDICAL CONDITION</b>									
Week-6	Smoking Cessation	Explain the importance of smoking cessation and nutritional support	C2			Interactive Lecture	1	MCQs	5
	Guidelines for optimization	Apply clinical guidelines to optimize diabetes, hypertension, and anemia preoperatively	C3				1		
	Practical performance	Demonstrate patient counseling for smoking cessation and preoperative nutritional support		P3		Demo	OSPE	0.5	
	SOPs compliance	Value the importance of empathy and ethical considerations when counseling patients.			A5	Role Play			
<b>TOPIC: INFORM CONSENT</b>									
Week-7	Definition and Purpose	Define informed consent and its purpose in surgical procedures	C1			Interactive Lecture	2	MCQs	4
	Key Components	Explain the key components of a valid informed consent, including risks, benefits, and alternatives	C2						

	Practical performance	Demonstrate the process of obtaining informed consent through role-play and simulation		P3		Demo and Role Play	1	OSPE	1
	SOPs compliance	Value respecting patient autonomy and clear communication during consent			A5	Role Play			
<b>TOPIC: PREOPERATIVE GUIDELINES</b>									
Week-8	Preoperative Fasting	Define preoperative fasting and its purpose.	C1			Interactive Lecture	1	MCQs/SEQs	4
	Rationale	Explain the rationale for fasting and its effect on outcomes.	C2				1		
	Prophylaxis Measures	Analyze preoperative prophylaxis	C3			Task based learning	1		
	Practical performance	Demonstrate compliance with fasting and prophylaxis protocols		P3		Simulation and Demo	1	OSPE	0.5
	SOPs compliance	Value adherence to guidelines for patient safety.			A5	Role Play			
<b>TOPIC: INTRA OPERATIVE PHASE- SURGICAL PRINCIPLES</b>									
Week-9	Aseptic Technique	Recall the principles of aseptic technique during surgery.	C1			Task based Learning	2	MCQs/SEQs	5
	Importance of Aseptic Conditions	Explain the importance of maintaining aseptic conditions in the OR.	C2						
	Personal Protective Equipment	Analyze guidelines for proper use of PPE in the OR.	C4						
	Practical performance	Demonstrate donning and doffing of PPE and aseptic practices		P3		Demo	1	OSPE	0.5
	SOPs compliance	Recognize the importance of teamwork in maintaining sterile environments.			A4	Role Play			
<b>TOPIC: HEMOSTASIS</b>									
Week-10	Hemostasis Techniques	Describe techniques for achieving hemostasis during surgery	C2			Interactive Lecture	2	MCQs/SEQs	4
	Hemostasis Tools	Explain the use of tools in achieving Hemostasis	C2						
	Hemostasis Strategies	Analyze strategies for minimizing bleeding	C4						
	Practical performance	Demonstrate techniques for achieving hemostasis using simulation or role-play.		P3		Demo	1	OSPE	1

	SOPs compliance	Follow SOPs to ensure effective and safe hemostasis techniques.			A4	Role Play			
<b>TOPIC: MONITORING</b>									
Week-11	Monitoring Parameters	Identify parameters critical to intraoperative monitoring	C1			Interactive Lecture/SGD	2	MCQs/SEQs	4
	Significance of Parameters	Explain the significance of monitoring heart rate, blood pressure, and oxygen saturation during surgery	C2						
	Problem Identification	Analyze trends in intraoperative monitoring to identify potential complications.	C4						
	Practical performance	Demonstrate the use of monitoring equipment		P3		Demo	1	OSPE	1
	SOPs compliance	Adhere to SOPs for accurate and continuous monitoring to ensure patient safety.			A4	Role-Play Scenarios			
<b>TOPIC: IMMEDIATE POSTOPERATIVE CARE</b>									
Week-12	Postoperative Care Protocols	Summarize protocols for immediate postoperative care	C2			Interactive Lecture	2	MCQs/SEQs	4
	Vital Sign Monitoring	Explain the importance of monitoring vital signs and patient stability post-surgery.	C2						
	Postoperative Complications	Analyze strategies to identify and address common postoperative complications.	C4						
	Practical performance	Demonstrate proper techniques for wound care and patient positioning.		P3		Simulation and Demo	1	OSPE	1
	SOPs compliance	Follow SOPs to ensure patient safety and effective recovery.			A4	Role Play			
<b>TOPIC: PAIN MANAGEMENT</b>									
Week-13	Analgesics Administration	Explain protocols for administering postoperative analgesics.	C2			Interactive Lecture	1	MCQs/SEQs	4
	Pain Management Strategies	Evaluate pain management strategies used in postoperative care.	C4			SGD	1		
	Practical performance	Demonstrate proper techniques for administering analgesics.		P3		Demo	1	OSPE	1
	SOPs compliance	Follow SOPs to ensure safe and ethical pain management practices.			A4	Role Play			
<b>TOPIC: FLUIDS AND NUTRITION</b>									

Week-14	Intravenous Fluids	Identify different types of intravenous fluids and their uses..	C1			Interactive Lecture	2	MCQs/SEQs	4
	Fluid Therapy	Explain fluid therapy for hydration and electrolyte balance postoperatively.	C3						
	Fluid Management Strategies	Analyze strategies for managing postoperative hydration and nutritional needs.	C4						
	Practical performance	Demonstrate preparation and administration of intravenous fluids.		P3		Demo	1	OSPE	1
	SOPs compliance	Comply with SOPs for nutritional support to enhance recovery.			A2	Demo			

**TOPIC: MOBILIZATION**

Week-15	Impact of Immobilization	Identify risks associated with prolonged immobilization.	C1			Interactive Lecture	2	MCQs/SEQs	4
	Benefits of Early Mobilization	Analyze the benefits of early mobilization in postoperative recovery.	C4						
	Practical performance	Demonstrate mobilization exercises of patient		P3		Demo	1	OSPE	1
	SOPs compliance	Appreciate the role of SOPs in promoting patient engagement in mobility			A3	Role Play			

**TOPIC: DISCHARGE PLANNING**

Week-16	Introduction	Describe the key components of effective discharge planning	C1			Interactive Lecture	2	MCQs/SEQs	4
	Laser types.	Explain the importance of rehabilitation exercises and follow-up care.	C2						
	Practical performance	Demonstrate proper wound care techniques.		P3		Demo	1	OSPE	0.5
	SOPs compliance	Comply with SOPs for discharge planning to emphasize follow-up care			A4	Role Play			

**Recommended Books:**

1. Bailey & Love's, 27th edition. Short Practice of Surgery.
2. Nancy Marie Phillips, 11th edition. Berry & Kohn's Operating Room Technique.
3. Maxine A. Goldman, 3rd edition. Pocket Guide to the Operating Room.
4. Kumar and Clark, 10th edition. Clinical Medicine.

### ASSESSMENT BREAKDOWN

S.No	Topics	No of MCQ	No of OSPE / OSCE Stations	Static / Interactive
1	Preoperative History	4	1	Interactive
2	Physical Examination	5	1	Interactive
3	Preoperative Investigation- Blood Tests	5	1	Static
4	Preoperative Investigation- Chest X-ray	5	1	Static
5	Preoperative Investigations- Basics of ECG	5	1	Static
6	Preoperative Optimization of Medical Condition	5	0.5	Interactive
7	Inform Consent	4	1	Interactive
8	Preoperative Guidelines	4	0.5	Static
9	Intra operative Phase- Surgical Principles	5	0.5	Static
10	Hemostasis	4	1	Interactive
11	Monitoring	4	1	Interactive
12	Immediate Postoperative Care	4	1	Interactive
13	Pain Management	4	1	Interactive
14	Fluids and Nutrition	4	1	Interactive
15	Mobilization	4	1	Interactive
16	Discharge Planning	4	0.5	Interactive
<b>Total</b>		<b>70</b>	<b>14</b>	<b>14</b>