

WAH MEDICAL COLLEGE

2021-2025

A photograph of the Wah Medical College building, a large, modern structure with a brown facade. The words "Wah Medical College" are printed in white on the building's exterior. A flagpole with a blue flag stands in front of the building. The background shows a clear blue sky with some light clouds.

Wah
Medical
College

Department of Medical Education

STUDY GUIDE
5th Year MBBS
Surgery & Allied

2021-2025

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VISION

National University of Medical Sciences envisions a world with a better quality of life for all by enhancing our contribution to healthcare, education, innovation, and research.



MISSION

To produce competent medical professional graduates equipped with sound knowledge & research capabilities based on scientific principles, imbued with ethics and moral values primed to serve the community through the profession and pursue research & advanced training in any branch of medicine”.

1. Outcomes of WMC MBBS Program

At the end of our five-year MBBS program, the graduates should be able to:

1. Independently manage common, non-critical clinical problems.
2. Assist in the management of critically ill patients & demonstrate competency in life saving procedures.
3. Exhibit the attributes of an ethical professional.
4. Conduct research which brings relevance to health care practices.
5. Act as an efficient community health promoter.
6. Exhibit scientific knowledge in all professional activities.
7. Demonstrate clear and efficient written & verbal communication skills.
8. Exhibit the habits of a lifelong learner.

2. Introduction to the Study Guide

1. Objectives of the Study Guide

Dear Students,

We, at the Department of Medical Education, Wah Medical College, have developed this study guide especially for you. This study guide aims to:

- Inform you about the organization of learning programs in this block which will help you to contact the right person in case of any difficulty.
- Help you in organizing and managing your studies throughout the block
- Guide you on assessment methods, rules, and regulations.
- Define the outcomes which are expected to be achieved at the end of the block.
- Identify the learning strategies that will be implemented to achieve the block outcomes such as lectures, small group discussions, clinical skills, demonstration, tutorial, and case-based learning
- Provide a list of learning resources such as books, and journals for students to consult to maximize their learning.

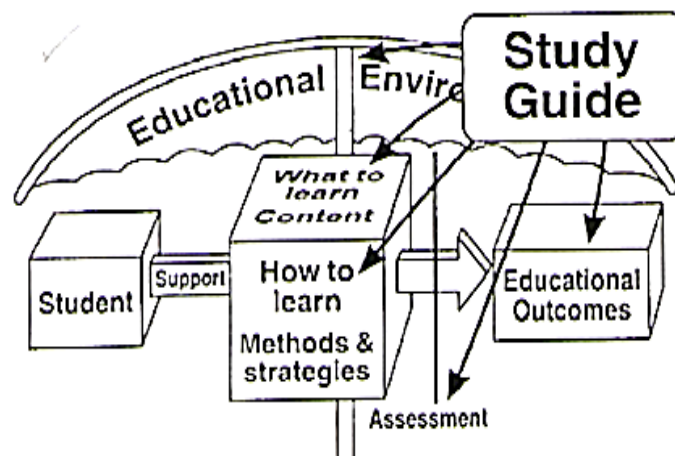


Figure 1. Objectives of the study Guide(HARDEN, J.M. LAIDLAW, E.A. HESKETH, 1999)

II. Commonly used abbreviations & Logos in the study guide







Learning Outcomes:

Learning outcomes are statements that define the expected goal of your course, lesson, or activity in terms of demonstrable skills or knowledge that will be acquired by you because of instruction. In simple words, these are the things that you must be able to tell or do with the required attitude after learning a particular topic.

1. Educational Strategies:

These are the methodologies through which you will be taught by your instructors.

These can include.

Abbreviation	Logos
CBL: Case based learning.	
Demonstrations	
SGD: Small group discussions	
BST: BedSide Teaching	
Skill Lab	
Clinical Teaching (OPD/ OT/ IPD)	

Small Group Discussion

This format helps students to clarify concepts, acquired skills or attitudes. Sessions are structured with the help of specific exercises such as patient cases, interviews, or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials, and self-study. The facilitator's role is to ask probing questions, summarize, or rephrase to help clarify concepts.

Case-Based Learning

This is a small group discussion format where learning is focused around a series of questions based on a clinical scenario. Specifically, designed case scenarios and the learning outcomes to be achieved are shared with the student before the session. Students prepare for the CBL and during class they discuss and answer the questions applying relevant knowledge gained in clinical and basic health sciences during the block. Faculty members are present as a guide and an assessor.

Self-Directed Study

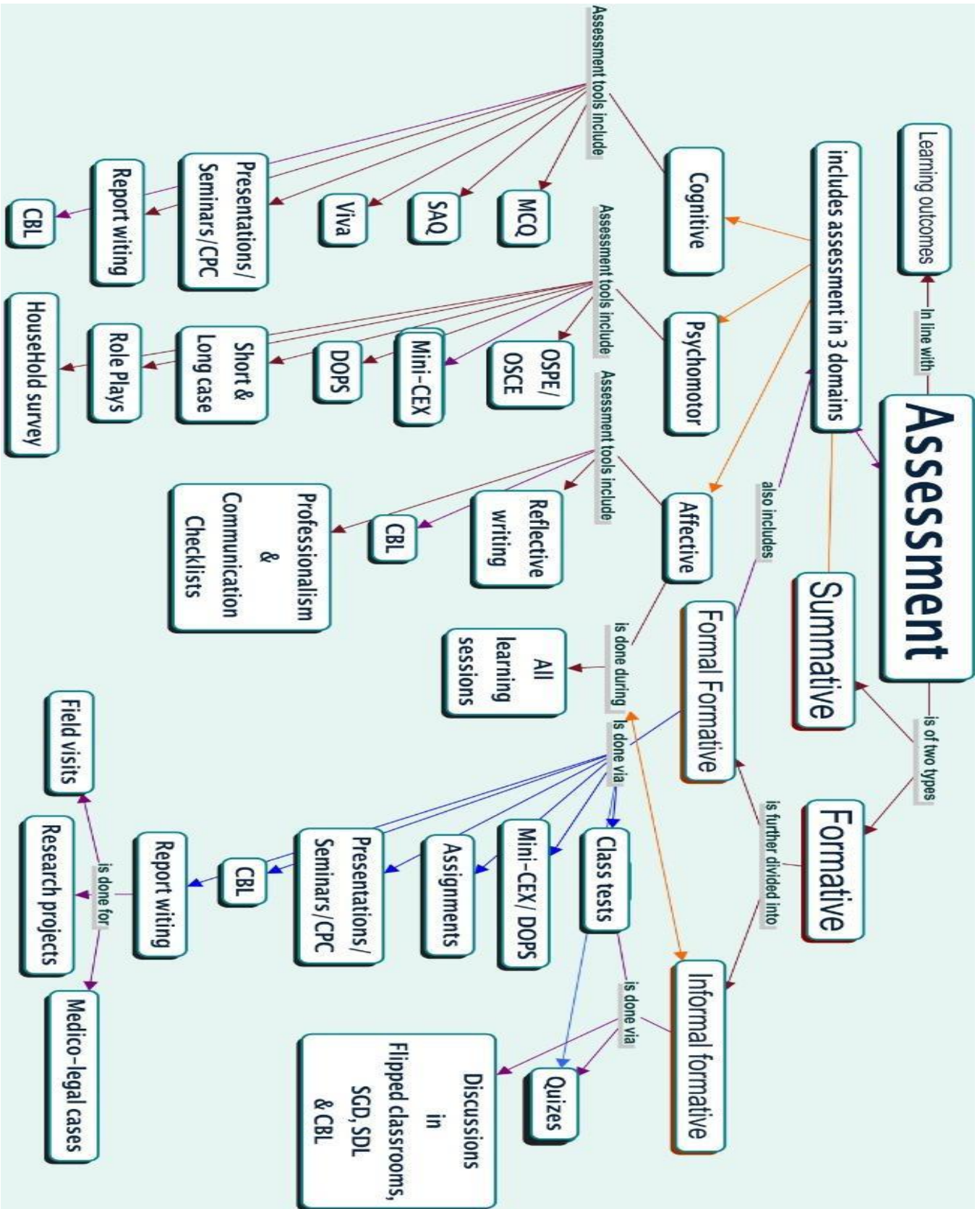
Students assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from the Learning Resource Center, teachers, and resource persons within and outside the college. Students can utilize the time within the college schedule hours for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

Bedside teaching

Students learn clinical case scenarios/ patient examination firsthand at the patient's bedside with the help of the instructor in case of online teaching, the same cases will be shown to you online with the help of videos and live clinical teaching.

3. Assessment Map & Strategies

i. Internal Assessment.



During the clerkships the students will be continually formatively assessed. The weightage of internal assessment will be 10-20 % in final professional MBBS Examination (as per decision of NUMS). There will be one EOC and one pre-annual examination. There will also be end of rotation exams at the end of clinical rotation in different units. The scores of the end of each clerkship assessment, clinical rotation assessment and pre-annual examination will be used for calculation of the internal assessment. It is mandatory for MBBS students to appear and pass the pre-annual exam with at least 33% marks in each subject as per PMC rules, failing which student is not eligible to appear in the university exam.

ii. Annual Professional Examination.

The University will take the final professional Examination as per PMC guidelines at the end of the academic year. Annual Theory & Practical Examination will be of 600 marks each in Surgery and allied & Medicine & allied. Annual Exam for Paediatrics & Gynecology and Obstetrics will be of 200 marks each. The pass score will be 50% in theory and practical separately.

4. Clerkship Module Committee

Chairperson	Prof. Dr. Musarat Ramzan
Coordinators	Medicine : Prof. Dr. Muzamil Jamil Surgery : Dr. Muhammad Azhar Gynecology : Dr. Shabana Kalsoom Pediatrics : Dr. Sohail Ashraf
Study guide developed By	Department of Medical Education Wah Medical College under Supervision of Brig. Dr. Abdul Waheed Khan(Retd)

5. Course contents

Surgery

Learning outcomes:

At the end of the clerkship rotation students should be able to

1. Administer the basic management of common surgical problems independently (PLO:1,2,3,6)
2. Provide BLS and assistance in severe trauma and critically ill surgical Patients (PLO:1,2,3,6)
3. Demonstrate ethical and professional attitude in surgical practice (PLO 3,6,8)
4. Communicate Clearly and effectively to all the concerned persons (PLO: 3,6,7)

S. No	Topic	Educational Strategies	Name of Instructor	Mode of Assessment	Importance (Must Know Should know Could know)
At the end of the day, final-year students should be able to:					
Surgical unit 1 rotation					
Unit 1	Orientation to the surgical ward	BST	Naeem	MCQs\SAQ	Must know
Day 1	Skin and subcutaneous lump Benign and malignant condition of skin	SGD CBL	Ashraf Muhammad Azhar Sadia Farhan Dr Saqib	s\ OSCE Short case Focused history and examination	
Learning outcomes:					
<ol style="list-style-type: none"> 1. Classify lumps in skin & and subcutaneous tissue 2. Differentiate between benign and malignant tumors 3. List the principles of diagnosis and management of lumps in skin & and subcutaneous tissue 4. Take the proper history and perform a clinical examination of a patient presenting with skin swelling, following the principles of professionalism and ethics 					
Day 2	Neck swelling other than thyroid Skin Ulcers Instruments	BST SGD CBL	Naeem Ashraf Muhammad Azhar	MCQs\SAQ s\ OSCE Short case	Must know

			Sadia Farhan Dr Saqib	Focused history and examination	
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Learning outcomes:

1. Classify neck masses, according to etiology
2. Diagnose neck mass based on history, clinical examination basic laboratory tests, and radiologic examinations.
3. Develop an appropriate differential diagnosis and provisional diagnosis
4. Discuss the management of patients with neck mass
5. Take the proper history of a patient with a neck mass
6. perform a clinical examination of the patient with a neck mass, following the principles of professionalism and ethics
7. Classify the ulcers
8. List the principles of diagnosis and management of ulcers based on their pathophysiology.
9. Take the proper history of the patient presenting with an ulcer and perform a clinical examination of the patient presenting with an ulcer

Day 3	Salivary glands Oral cavity instruments	BST SGD CBL	Naeem Ashraf Muhamm ad Azhar Sadia Farhan Dr Saqib	MCQs\SAQ s\ OSCE Short case Focused history and examination	Must Know
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Learning outcomes:

1. differentiate on clinical grounds between infection, obstruction, benign and malignant neoplasms of the salivary glands.
2. Suggest relevant investigations to help in the diagnosis of salivary gland disorder and management plan
3. Take the proper history of the patient presenting with an ulcer and perform a clinical examination of the patient presenting with an ulcer
4. Classify benign and malignant lesions of the oral cavity, according to etiology
5. Diagnose benign and malignant oral cavity lesions based on history, clinical examination basic laboratory tests, and radiologic examinations.
6. Develop an appropriate differential diagnosis and provisional diagnosis
7. Discuss the management
8. Take the proper history of a patient with benign and malignant lesions of the oral cavity
9. perform a clinical examination of the patient with benign and malignant lesions of the oral cavity, following the principles of professionalism and ethics
10. identify the instruments and list their uses

Day 4	Burns Skin grafting and flaps Skill lab Suturing techniques IV LINE	BST SGD CBL	Naeem Ashraf Muhamm ad Azhar Sadia Farhan Dr Saqib	MCQs\SAQ s\ OSCE Short case Focused history and examination	Must Know
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Learning outcomes:

1. Apply basic concepts of burn injury and pathophysiology to the evaluation, resuscitation, clinical management, and rehabilitation of the burned patient
2. Evaluate a burned patient
3. Develop an initial treatment plan for stabilization and fluid replacement using basic principles of burn management.
4. Assess the appearance of the burn wound regarding its depth and percentage
5. Enlist different types of grafts and flaps in the skin and describe these uses
6. Perform different types of suturing
7. Maintain IV line

Day 5	Short case Long case Patient safety Infection control	BST SGD	Naeem Ashraf Muhamm ad Azhar Sadia Farhan Dr Saqib	MCQs\SAQ s\ OSCE Short case Focused history and examination	Should know
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Learning outcomes:

1. Perform short case
 2. Perform a focused history and examination of the allotted case
 3. Identify the key points in patient safety
- Describe the methods of infection control

Saturday Assignment

Day 6	Benign and malignant diseases of the breast	BST SGD CBL Reciprocal teaching	Naeem Ashraf Muhamm ad Azhar Sadia Farhan Dr Saqib	MCQs\SAQ s\ OSCE Short case Focused history and examination	Must know
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Learning outcomes:

1. Classify Benign Breast Disease
2. Diagnose Benign breast disease based on history and clinical presentation
3. Enumerate the Diagnostic investigations of Benign Breast Diseases
4. Design a management plan for Benign Breast Disease and its complication
5. Diagnose Ca Breast based on signs and symptoms and investigations
6. Suggest a management plan for Ca breast and its complications by applying basic concepts of anatomy and lymphatic drainage of the area
7. Take the history of a patient with a breast lump
8. Perform a clinical examination of a patient with a breast lump
9. Counsel the patient about the importance of completion of treatment

Day 7	Thyroid gland 1. Goiter 2. Hyperthyroidism 3. Hypothyroidism 4. Thyroiditis 5. Thyroid malignancy Adrenal glands	BST SGD CBL	Naeem Ashraf Muhamm ad Azhar Sadia Farhan Dr Saqib	MCQs\SAQ s\ OSCE Short case Focused history and examination	Must know
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Learning outcomes:

1. Correlate the clinical presentation of simple and toxic goiter to the anatomical and physiological basis of the thyroid gland
2. Diagnose different thyroid conditions based on signs and symptoms
3. Suggest the diagnostic investigations needed to rule out other thyroid conditions
4. Enumerate the Treatment options for goiter,hyperthyroidism, hypothyroidism and thyroiditis
5. Classify Ca Thyroid
6. Diagnose Ca thyroid based on clinical presentation and investigations
7. Describe the management plan for Ca thyroid
8. Take the history of a patient with neck /thyroid swelling
9. Perform a clinical examination of a patient with neck /thyroid swelling
- 10.Counsel the patient about the progression of the disease
- 11.Diagnose disorders of adrenal glands based on clinical presentation and investigations and develop a management plan
- 12.Take history and examine patients with adrenal gland diseases

Day 8	Parathyroid gland Surgical oncology OSCE	BST SGD CBL Peer assessment schemes	Naeem Ashraf Muhamm ad Azhar Sadia Farhan Dr Saqib	MCQs\SAQ s\ OSCE Short case Focused history and examination	Should know
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Learning outcomes:

1. Diagnose disorders of parathyroid based on clinical presentation and investigations
2. Develop management plans for patients with parathyroid diseases
3. **Take history and perform clinical examination of a patient with parathyroid diseases**
4. Enlist the principle of surgical oncology

Day 9	Blood Transfusion Surgical infection <ul style="list-style-type: none"> • Sepsis • Necrotizing fasciitis • Clostridium Skill lab <ul style="list-style-type: none"> • FNAC Trucut	BST SGD CBL	Naeem Ashraf Muhamm ad Azhar Sadia Farhan Dr Saqib	MCQs\SAQ s\ OSCE Short case Focused history and examination	Should know
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Learning outcomes:

1. Discuss the protocols for blood transfusion
2. Elaborate principles of blood transfusion of a surgical patient
3. Discuss transfusion reaction and their management
4. **Assist in blood transfusion in the ward**
5. Define the following terms: systemic inflammatory response syndrome (SIRS), sepsis, severe sepsis, septic shock, MOFS, and acute respiratory distress syndrome (ARDS)
6. Describe the pathophysiology and mechanism of sepsis and prioritize the treatment of sepsis.
7. Describe necrotizing fasciitis and its management
8. Describe clostridium infection in surgery and its management
9. **Perform FNAC and trucut biopsy with aseptic technique**

10	Short case Focused history and examination Per and post-operative care of patients	BST SGD	Naeem Ashraf Muhamm ad Azhar Sadia Farhan Dr Saqib	MCQs\SAQ s\ OSCE Short case Focused history and examination	Should Know
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Learning outcomes:

1. **Perform Short cases**
2. **Take a focused history and examine the allotted case**
3. Rationalize routine intravenous fluid replacement in surgical patients
4. Identify the commonly prescribed intravenous fluids
5. Optimize management of co-morbid.
6. Describe important complications of common operations
7. Recognition of potential post-operative complications

8. Diagnosis of post-operative complications
9. Management of post-op complications

Day 11	CPC - Short Case & Long Case and Quiz	All available consultant		Quiz	
Day 12	Acute abdomen	BST SGD CBL	Naeem Ashraf Muhammad Azhar Sadia Farhan Dr Saqib	MCQs\SAQs\ OSCE Short case Focused history and examination	Must know

Learning outcomes:

1. Describe the symptoms, signs, and differential diagnosis for patients presenting with an acute abdomen.
2. Discuss the investigations and management of patients with acute abdominal pain
3. Choose the appropriate imaging in the investigation of acute abdominal pain
4. Generate differential diagnoses
5. Assess the indications for surgery and other treatment options
6. Summarize complications that can result from acute abdominal conditions
7. Describe the pre-and postoperative management of a patient with acute abdomen
8. Take the history of a patient with acute abdomen
9. Perform a clinical examination of a patient with acute abdomen
10. Evaluate the role of surgery in patients with mass abdomen
11. Take the history of a patient with a mass abdomen
12. Perform clinical examination of a patient with a mass abdomen

\Day 13	Upper and lower abdominal pain X -rays	BST SGD CBL	Naeem Ashraf Muhammad Azhar Sadia Farhan Dr Saqib	MCQs\SAQs\ OSCE Short case Focused history and examination	Must know
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Learning outcomes:

1. Describe the etiology and presentation of the upper and lower abdomen.
2. Generate differential diagnosis and management of patients presenting with upper and lower abdominal pain according to regions.
3. Justify the need for emergency care for upper and lower abdominal pain
4. Identify and explain the Xray's

Day 14	Intestinal obstruction Obstructed hernia Intussusception Volvulus Adhesion/bands Gallstone ileus Paralytic ileus Fluid and electrolyte balance	BST SGD CBL Peer-assisted learning	Naeem Ashraf Muhammad Azhar Sadia Farhan Dr Saqib	MCQs\SAQs\ OSCE Short case Focused history and examination	Must know
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Learning outcomes:

1. List the causes of intestinal obstruction
2. Describe the symptoms, signs, and differential diagnosis of patients presenting with intestinal obstruction.
3. Choose the appropriate imaging in the investigation of intestinal obstruction
4. Discuss the investigations and initial management of patients with intestinal obstruction
5. Discuss definite management of intestinal obstruction according to the cause
6. Summarize complications that can result from small bowel obstruction
7. Describe the pre-and postoperative management of intestinal obstruction according to cause
8. Take the history of a patient with intestinal obstruction
9. Perform a clinical examination of a patient with intestinal obstruction
10. Recognize the different types of fluid used for optimization, especially Hartmann's, Normal 0.9% Saline and Dextrose
11. Calculate the correct volume and rate of administration
12. Assess the volume of body fluid depletion,
13. Administer fluids according to age and comorbidities.
14. Monitor the progression of fluid optimization

Day 15	Chronic abdominal pain Skill lab Chest intubation ATLS	BST SGD CBL	Naeem Ashraf Muhammad Azhar Sadia Farhan Dr Saqib	Must know
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Learning outcomes:

1. outline relevant investigations for abdominal swelling due to various pathological causes.
2. Describe the etiology, presentation, and management of chronic pain in the abdomen.
3. Generate differential diagnosis and management of patients presenting with chronic abdominal pain according to regions.
4. Justify the need for emergency care for chronic abdomen
5. Take the history of a patient with chronic abdominal

6. Perform clinical examination of a patient with a mass abdomen and chronic pain abdomen

7. Perform ATLS

Perform chest intubation on mannequin

MCQs\SAQs\ OSCE

Short case

Focused history and examination

Day 16	Short case Focused history and examination Consent Acid Base balance	BST SGD	Naeem Ashraf Muhammad Azhar Sadia Farhan Dr Saqib	Should know
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Learning outcomes:

1. Perform short case
2. take a focused history and examination of the allotted case
3. Take consent from the patient for surgery
4. Describe acid base balance

Interpret the report of ABGs

OSCE

Short case

Focused history and examination

Saturday assignments

Day 17	Acute and chronic cholecystitis	BST SGD CBL	Naeem Ashraf Muhammad Azhar Sadia Farhan Dr Saqib	Must know
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Learning outcomes:

1. Elist causes of Cholecystitis
2. Relate structural anomalies and pathological changes to predisposition to cholecystitis
3. describe the Signs and Symptoms of acute and chronic cholecystitis
4. Discuss the diagnosis and management
5. Discuss the emergency and elective approach to the management of Cholecystitis and its complications.
6. Take the history of a patient with acute and chronic cholecystitis
7. Perform clinical examination of a patient with acute and chronic cholecystitis

MCQs\SAQs\ OSCE

Short case

Focused history and examination

Day 18	Obstructed jaundice <ul style="list-style-type: none"> • Choledocholithiasis • Ca Pancreas • Periapillary Ca cholangiocarcinoma Wound healing Wound infection Minimal invasive surgery	BST SGD	Naeem Ashraf Muhammad Azhar Sadiah Farhan Dr Saqib	Should know
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Learning outcomes:

1. provide the etiological and anatomical basis of obstructed jaundice
2. Diagnose obstructive jaundice based on clinical presentation and diagnostic tests
3. Plan management of obstructive jaundice and its complications according to its etiology
4. Take the history of a patient with obstructive jaundice Perform clinical examination of a patient with obstructive jaundice
5. Describe stages and types of wound healing
6. Classify different types of surgical wounds and recommend an appropriate antibiotic regimen

MCQs\SAQs\ OSCE

Short case

Focused history and examination

Day 19	Sepsis <ul style="list-style-type: none"> • Bacteremia • Septicemia • SIRS • MOFS Severe Sepsis & Septic shock	BST SGD CBL	Naeem Ashraf Muhammad Azhar Sadiah Farhan Dr Saqib	Should know
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Learning outcomes:

1. Define the following terms: systemic inflammatory response syndrome (SIRS), sepsis, severe sepsis, septic shock, MOFS and acute respiratory distress syndrome (ARDS).
2. Differentiate between SIRS, sepsis, severe sepsis and septic shock on the basis of signs, symptoms, vital signs, hemodynamic measures and laboratory tests
3. Explain the seriousness of sepsis
4. Describe the microbiological causes of sepsis.
5. Describe the pathophysiology and mechanism of sepsis.
6. Describe BUFALO
7. Prioritize for treatment of sepsis.
8. Explain the role of vasoactive agents in supporting the physiological function of a patient with sepsis.
9. Select appropriate agent, given details of a patient's condition.

10. Develop an appropriate monitoring program for patients with sepsis.
11. List the principles of diagnosis and management of sepsis.
12. Describe the symptoms, signs, and differential diagnosis for patients presenting with acute pancreatitis and chronic
13. Enumerate causes of pancreatitis and its predisposing factors
14. Assess the severity of pancreatitis using Ranson and Glasgow criteria
15. Elaborate the Diagnosis of pancreatitis based on its signs and symptoms
16. Manage pancreatitis and its complications
17. **Take history and perform a clinical examination of a patient with acute and chronic pancreatitis**
18. Enlist principle of surgical ethics

MCQs\SAQs\ OSCE

Short case

Focused history and examination

Day 20	Day care surgery Skill lab Gowning and gloving	BST SGD CBL	Naeem Ashraf Muhammad Azhar Sadiah Farhan Dr Saqib	Should know
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Learning outcomes:

1. Enlist principle of day care surgery
2. Perform gowning and gowned

MCQs\SAQs\ OSCE

Short case

Focused history and examination

Day 21	Short case Focused history and examination	BST SGD	Naeem Ashraf Muhammad Azhar Sadiah Farhan Dr Saqib	Must know
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Learning outcomes:

1. **Perform short case**
2. **take a focused history and examination of the allotted case**

MCQs\SAQs\ OSCE

Short case

Focused history and examination

Day 22	CPC+ Short & Long Case		All available consultant	Quiz	Should know
Day 23	Practice Short Case Long Case OSCE Mini Cex , history journal and Log Book	BST SGD	Naeem Ashraf Muhammad Azhar Sadiah Farhan Dr Saqib		Should know

Learning outcomes:

1. Perform short case
2. take a focused history and examination of the allotted case
3. perform the OSEC
4. Perform mini cex

Complete history journal and log book

MCQs\SAQs\ OSCE

Short case

Focused history and examination

Day 24	Practice Short Case Long Case OSCE Mini Cex , history journal and Log Book	BST SGD	Naeem Ashraf Muhammad Azhar Sadia Farhan Dr Saqib	Should know
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Learning outcomes:

1. Perform short case
2. take a focused history and examination of the allotted case
3. perform the OSEC
4. Perform mini cex

Complete history journal and log book

MCQs\SAQs\ OSCE

Short case

Focused history and examination

Day 25	WARD TEST 1. OSCE 2. SHORT CASE 3. FOCUSED HISTORY AND EXAMINATION			
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Surgical unit 2 rotation

Days	Topics/Themes	Instructional strategies	Teacher Name	Must Know Should know Could know
Day1	Ward orientation Trauma 1. Principle of trauma management 2. Triage	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Must know
<p>Learning Outcomes:</p> <ul style="list-style-type: none"> • State the principles of surgical treatment in a multi-injured patient. • Assess priorities during all phases of management following ATLS principles. • Justify the importance of re-assessment of the patient with regard to earlier interventions. • Differentiate between primary and secondary surveys. • Define triage and its importance • Take the proper history of a patient presenting with trauma (AMPLE) • Perform clinical examination of a patient presenting with trauma • Provide emergency care to the patient of poly-trauma as per ABCDE protocol <p>Method of Assessment:</p> <ul style="list-style-type: none"> • MCQs\SAQs\ OSCE Short case • Focused history and examination 				
Day 2	1. Blunt trauma abdomen 2. Shock and blood transfusion 3. Minimal invasive surgery	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Must know
<p>Learning Outcomes:</p> <ul style="list-style-type: none"> • Elaborate upon abdominal/ genitourinary injuries reference to causes, signs, symptoms diagnosis, management predisposing factor, complications and preventions • Take the proper history of a patient presenting with abdominal/ genitourinary injury • Perform clinical examination of a patient presenting with abdominal injury/ genitourinary trauma • Discuss the protocols of blood transfusion • Elaborate principles of blood transfusion of a surgical patient 				

- Clinically assess hypovolemia
- Identify patients in need of fluid optimization/blood transfusion
- Enlist the principle of minimally invasive surgery

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 3	1. Thoracic trauma 2. Urogenital trauma Metabolic response to trauma	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Should know
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Learning Outcomes:

- Differentiate between different types of chest injuries based on the mechanism of pathophysiology findings
- Take the proper history of the patient presenting with chest trauma.
- Perform clinical examination of a patient presenting with chest trauma
- Identify the urogenital trauma and enlist the management plan
- perform urinary catheterization
- Describe the physiological response to injury

Method of Assessment:

- MCQs\SAQs\ OSCE
- Short case
- Focused history and examination

Day 4	Nutrition Pre- and post-operative care Skill lab <ul style="list-style-type: none"> • Iv line Suturing technique	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Must know
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Learning Outcomes:

- Identify the different types of nutritional support – oral, nasogastric, gastro/jejunoscopy, and parenteral. Describe what total parenteral nutrition (TPN)
- enlist the associated risks of TPN and parenteral nutrition
- Discuss the monitoring parameters for these patients.
- Identify patients in need of nutritional optimization
- Rationalize routine intravenous fluid replacement in surgical patients
- Identify the commonly prescribed intravenous fluids
- Optimize management of co-morbid.

- Describe important complications of common operations
- Recognition of potential post-operative complications
- Diagnosis of post-operative complications
- Management of post-op complications
- **Perform suturing on given material**

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 5	Short case Focused history and examination High-risk consent and counseling shock	BST SGD	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Should know
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Learning Outcomes:

- Perform Short case of allotted case
- Performed focused history and examination of the allotted case
- Take high-risk consent from patients or attended
- Perform counseling of a patient regarding surgery
- Describe different types of shock

Method of Assessment:

- Short case
- Focused history and examination

Day 6	<ul style="list-style-type: none"> • Esophagus • Upper GI Bleed • Dysphagia 	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Should know
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Learning Outcomes:

- Discuss the Immediate Management of Upper GI Bleed
- Discuss the fluid resuscitation of Upper GI Bleed
- list differential diagnosis of Upper GI Bleed
- Elaborate the management plan for upper GI bleed
- **Take the history of a patient with Hematemesis**
- **Perform a clinical examination of a patient with Hematemesis**
- Relate abnormalities of anatomy and physiology of esophagus to etiology and types of motility disorders
- generate differential diagnosis of motility disorders based on signs and symptoms.
- Propose diagnostic and management plan of patient with motility disorder

- Relate cause, risk factors to pathophysiology of Ca Esophagus.
- Formulate a proper management plan for patient based on stage and grade of cancer
- Identify factors in the patient history that are useful in diagnosing the etiology of dysphagia.
- discuss diagnostic investigation for dysphagia
- Take the history of a patient with dysphagia
- Perform clinical examination of a patient with dysphagia
- Take the history of a patient with CA esophagus
- Perform clinical examination of a patient with ca esophagus

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 7	Acid peptic diseases Carcinoma stomach Neuroendocrine tumor of GIT	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Should know
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Learning Outcomes:

- Discuss surgical management of acid peptic diseases including GORD and its complications
- Discuss the causes of Ca stomach
- Discuss the warning signs which lead to the diagnosis of Ca stomach
- Discuss the presenting complaints of Ca stomach
- list the investigations needed to diagnose the case
- Describe the management of CA stomach according to stage
- Take the history of a patient with Ca stomach
- Perform clinical examination of a patient with Ca stomach
- Discuss the neuroendocrine tumor of GIT

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 8	<ul style="list-style-type: none"> • Liver • Spleen • Surgery in the tropics 	BST SGD CBL Peer-assisted teaching	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Must know
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Learning Outcomes:

- Generate differential diagnosis of SOL Liver based on signs and symptoms
- Develop a plan for diagnosis, treatment, and prevention of SOL liver and its complications
- **Take the history of a patient with SOL liver**
- **Perform clinical examination of a patient with SOL liver**
- Enlist surgical disorders of the spleen and their management
- Discuss surgery in the tropics

Method of Assessment:

- MCQs\SAQs\ OSCE, Short case
- Focused history and examination

Day 9	Ventral hernias Inguinal Femoral Paraumbilical Epigastric Skill lab FNAC Trucut	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Must know
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Learning Outcomes:

- Differentiate between direct, indirect, incarcerated, and strangulated hernias based on signs and symptoms
- Develop a differential diagnosis in the case of a mass in the inguinal or femoral region, or the scrotum.
- Discuss the various investigations that help in diagnosis
- Describe the principles of a surgical repair of a direct and indirect inguinal hernia
- Describe the complications of untreated abdominal wall defects
- **Take the history of a patient with a mass in the inguinal or femoral region, or the scrotum**
- **Perform a clinical examination of a patient with a mass in the inguinal or femoral region, or the scrotum**
- **Perform FNAC**
- **Perform trucut biopsy**

Method of Assessment:

- MCQs\SAQs\ OSCE, Short case
- Focused history and examination

Day 10	Short case Focused history and examination	BST SGD	Brig Muhammad Pervez	Should know
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	Breaking the bad news		Dr Naeem Akhtar Dr Munawer Dr Samreen	
Learning Outcomes: <ul style="list-style-type: none"> • Perform short case • Take a focused history and examination of the allotted case • Perform breaking the bad news to the patient and attendant Method of Assessment: <ul style="list-style-type: none"> • Short case • Focused history and examination 				
Day 11	CPC + Short & Long Case		All available consultant	Quiz
Day 12	Acute limb ischemia Chronic limb ischemia Diabetic foot	BST SGD Reciprocal teaching (PBL)	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawer Dr Samreen	Must know
Learning Outcomes: <ul style="list-style-type: none"> • Identify clinical manifestations and etiology of acute and chronic limb ischemia • Relate the major risk factors to the etiology and pathophysiology of acute and chronic limb ischemia. • Elaborate differential diagnosis of acute and chronic limb ischemia. • Suggest appropriate investigations to make the diagnosis. • Discuss the medical and surgical management of acute and chronic limb ischemia. • Plan appropriate nursing care for the patient with acute and chronic limb ischemia • Take the history of a patient with limb ischemia • Perform clinical examination of a patient with limb ischemia • Identify the Signs and Symptoms of diabetic foot patients • assess the severity of Diabetic foot ulcer • Develop pre-op, and post-op management plan for a diabetic foot patient. • Counsel a diabetic patient about foot care Method of Assessment: <ul style="list-style-type: none"> • MCQs\SAQs\ OSCE Short case • Focused history and examination 				

Day 13	Gangrene Amputation Instruments	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawer Dr Samreen	Must know
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Learning Outcomes:

- Disorder of lymphatics
- discuss different types of gangrene and its causes
- enlist different levels of amputations and their principles
- take a history of gangrene foot
- perform an examination of gangrene foot
- discuss the disorder of lymphatics
- identify the instruments

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 14	Varicose vein DVT X-ray	BST SGD CBL Peer-assisted teaching	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawer Dr Samreen	Should know
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Learning Outcomes:

- Elaborate clinical presentation, etiology, and pathophysiology of varicose veins.
- Suggest differential diagnosis based on assessment of the patient.
- Classify varicose veins.
- Rule out the diagnosis of DVT using appropriate investigations.
- Suggest conservative or surgical management of varicose veins where indicated
- Take the history of a patient with varicose veins
- Perform clinical examination of a patient with varicose veins
- List risk factors for the development of a Deep Vein Thrombosis (DVT)/chronic limb ischemia.
- Recognize the signs and symptoms of DVT and chronic limb ischemia.
- Generate a prioritized differential diagnosis of DVT/based on specific physical findings using pre-test probability tools
- Justify the utility of various diagnostic tests based on their interpretation

- Develop an appropriate management plan for DVT/CLI.
- Develop a prophylaxis plan for deep vein thrombosis prophylaxis where indicated
- Take the history of a patient with swelling of one leg
- Perform a clinical examination of a patient with swelling of one leg
- Describe the x rays provided

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 15	Instruments OSCE Skill lab Sutures and suturing technique	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Should know
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Learning Outcomes:

- Identify the instruments
- List the uses of instrument provided
- Perform ATLS
- Perform Chest intubation in mannequin
- Discuss the given OSEC

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 16	Short case Focused history and Examination Day care surgery	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Should know
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Learning Outcomes:

- Perform short case
- Take focused history and examination of the allotted case
- Discuss daycare surgery
- Discuss peripheral vascular diseases

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Saturday Assignment

Day 17	Empyema thoracic Mediastinal mass CA lung	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Must know
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Learning Outcomes:

- differentiate between types of para pneumonic abscess on the basis of etiology.
- Generate differential diagnosis of empyema thoracic
- Understand the role of radiographic, endoscopic, and laboratory evaluation in the diagnosis
- Devise a proper management plan including pharmacotherapy and the need for surgical intervention
- Discuss the complications of the disease and surgical procedures for empyema thoracic
- Propose a postoperative follow-up plan for the patient
- **Take the history of a patient with empyema thoracic**
- **Perform clinical examination of a patient with empyema thoracic**
- Generate differential diagnosis of mediastinal mass based on signs and symptoms
- Devise a management plan for the treatment and diagnosis of mediastinal mass
- **Take the history of a patient with mediastinal masses**
- **Perform clinical examination of a patient with mediastinal masses**
- identify the causes and risk factors for lung cancer
- Advocate measures and guidelines to decrease the risk of developing lung cancer and its screening
- Discuss the prognostic factors of Ca lung.
- Classify tumors based on types, staging, and grading
- justify the role of radiographic, endoscopic, and laboratory evaluation in the diagnosis
- Formulate a management plan using various modalities

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 18	Inflammatory bowel diseases Acute Appendicitis Acute abdomen in pediatrics	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Samreen	
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Learning Outcomes:

- Explain the signs and symptoms of acute appendicitis in relation to pathophysiology
- Discuss the differential diagnosis of acute appendicitis
- Calculate Alvarado's score in case of pain right iliac fossa
- Explain the management of acute appendicitis
- **Take history and perform a clinical examination of a patient with acute appendicitis**
- Discuss surgical aspects of inflammatory bowel diseases including signs and symptoms, investigation, and treatment
- Explain sign signs and symptoms of acute abdomen in pediatrics in relation to pathophysiology and its management

Day 19	Bening anorectal condition <ul style="list-style-type: none"> • Fissure • Hemorrhoids • Polyp • Perianal abscess • Fistula in Ano Colorectal carcinoma	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr. Samreen	
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Learning Outcomes:

- Explain the common causes of rectal bleeding
- Explain the management of benign anorectal conditions leading to bleeding PR including fissures, hemorrhoids, and polyp
- discuss the signs and symptoms of colorectal cancer and its underlying pathology
- Explain the management of colorectal cancer, including relevant investigations and surgical options available
- **Take the history of a patient with Ca colon / rectal bleeding**
- **Perform clinical examination of a patient with Ca colon / rectal bleeding**
- Correlate the etiology and pathophysiology of perianal abscess/ fissure to its clinical presentation
- Discuss the management plan for fistula in Ano and perianal abscess
- Explain the etiology and pathophysiology of anal fistula

- Discuss the management of a patient with fistula in Ano

Day 20	Congenital anomalies of upper GIT Congenital anomalies of lower GIT Skill lab Gloving and gowning	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Must know
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Learning Outcomes:

- Correlate the embryological origin of the upper GI tract with the Pathophysiology of Esophageal atresia, pyloric stenosis, Hirschsprung's Disease
- Differentiate between the Clinical presentation of Esophageal atresia, pyloric stenosis, Hirschsprung's Disease, biliary atresia
- Propose diagnostic investigations and treatment options in Esophageal atresia, pyloric stenosis, Hirschsprung's Disease, biliary atresia
- Develop a management plan for Complications of Esophageal atresia, pyloric stenosis, and Hirschsprung's Diseases
- Correlate defects in embryologic developments to the causes, types and clinical features, radiological findings of neonatal intestinal obstruction.
- illustrate the contribution of different imaging modalities in diagnosis of neonatal intestinal obstruction.
- Develop an approach to the management of neonatal obstruction involving clinical and imaging data
- Identify the surgical intervention and post-surgical complications for neonatal intestinal obstruction.
- identify embryological defect that leads to imperforate anus.
- Demonstrate an approach to the diagnosis of imperforate anus.
- Develop a treatment plan for Imperforate anus based on diagnostic classification and clinical presentation.
- Take the history of a patient with congenital anomalies of upper and lower GI
- Perform examine a patient with congenital anomalies of upper and lower GI
- Perform gloving and gowning

Method of Assessment:

- MCQs\SAQs\ OSCE, Short case

<ul style="list-style-type: none"> Focused history and examination 				
21	Short case Focused history and Examination Bleeding PR	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Samreen	Must know
Learning Outcomes: <ul style="list-style-type: none"> Perform short case Take a focused history and examination of the allotted case Discuss bleeding per rectum Method of Assessment: <ul style="list-style-type: none"> MCQs\SAQs\ OSCE ,Short case Focused history and examination 				
Day 22	CPC + Short & Long Cas	All available consultant	qu iz	Should know
Day 23	Practice Short Case Long Case OSCE Mini Cex , History journal and Log Book	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Must know
Learning Outcomes: <ul style="list-style-type: none"> Perform short case take a focused history and examination of the allotted case perform the OSEC Perform mini cex Complete history journal and log book Method of Assessment: <ul style="list-style-type: none"> MCQs\SAQs\ OSCE Short case Focused history and examination 				
Day 24	Practice Short Case Long Case OSCE Mini Cex , History journal and Log Book	BST SGD CBL	Brig Muhammad Pervez Dr Naeem Akhtar Dr Munawar Dr Samreen	Must know
Learning Outcomes: <ul style="list-style-type: none"> Perform short case take a focused history and examination of the allotted case 				

- perform the OSEC
- Perform mini cex
- Complete history journal and log book

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 25	Ward test Short case Focused history and examination OSCE
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Subspecialty rotation

Urology

Days	Topics/Themes	Instructional strategies	Teacher Name	Must Know Should know Could know
Day 1	Orientation to urology Urolithiasis	BST SGD CBL	Dr Abdullah Omer Dilawar	Should know
<p>Learning Outcomes:</p> <ul style="list-style-type: none"> • List risk factor for urolithiasis • Classify renal, ureteric and bladder calculi • Diagnose urinary tract calculi base on sign and symptoms and investigations • Discuss management of calculi of urinary tract • Take history and perform clinical examination of patient with urolithiasis <p>Method of Assessment:</p> <ul style="list-style-type: none"> • MCQs\SAQs\ OSCE Short case • Focused history and examination 				
Day 2	Urinary tract infections	BST SGD CBL	Dr Abdullah Omer Dilawar	Should know
<p>Learning Outcomes:</p> <ul style="list-style-type: none"> • Classify urinary tract infections • List risk factors • Discuss sign and symptoms of UTI • List investigation for diagnosis • Discuss management plan • Take history and perform clinical examination of case of urinary tract infection <p>Method of Assessment:</p> <ul style="list-style-type: none"> • MCQs\SAQs\ OSCE Short case • Focused history and examination 				
Day 3	Uro-oncology	BST SGD CBL	Dr Abdullah Omer Dilawar	Should know
<p>Learning Outcomes:</p> <ul style="list-style-type: none"> • Classify kidney tumor • Discuss diagnosis of kidney tumor based on sign and symptoms and investigations • Devise management plan • List etiology of urinary bladder tumor 				

- discuss sign and symptoms
- outline management plane of bladder tumor based on investigations
- classify testicular tumor
- discuss sign and symptom of testicular tumor
- enlist investigation for diagnosis
- develop a management plan
- **take history and perform clinical examination of patient with urinary tract tumor**

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 4	Urinary Obstruction and Urological emergencies	BST SGD CBL	Dr Abdullah Omer Dilawar	Should know
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Learning Outcomes:

- Differentiate between obstruction at different levels of the urinary tract based on history, Clinical features and diagnostic modalities
- Discuss the presenting features, signs and symptoms of urological emergencies
- Generate a prioritized differential of the most important and likely causes of a patient's emergency
- Study the classification of urological emergencies based on etiology
- Discuss the appropriate investigations leading to a definite diagnosis
- Devise a management plan according to clinical presentation
- **Take history and perform clinical examination of patient bladder outlet obstruction**

Day 5	1. Urology trauma		Dr Abdullah Dr Omer Dilawar	Should know
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Learning Outcomes:

- Identify the urogenital trauma and enlist the management plan
- **To perform urinary catheterization**

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Anesthesia & Pain Management

Days	Topics/Themes	Instructional strategies	Teacher Name	Must Know Should know Could know
Day 1	General Anesthesia <ul style="list-style-type: none"> Inhalational Anesthesia Endotracheal Intubation Criteria for Ventilatory Support 	BST SGD	Brig ® Imran Ul Haq Dr Muhammad Fareed Azam	Should know
Learning Outcomes: <ul style="list-style-type: none"> Criteria for Weaning Patient off from Ventilator Discuss pre anesthesia workup Discus different types of general anesthesia and its indications List different general anesthesia drugs and its complications Monitor the patient under general anesthesia Method of Assessment: <ul style="list-style-type: none"> MCQs\SAQs\ OSCE 				
Day 2	Regional Anesthesia <ul style="list-style-type: none"> Epidural Anesthesia Spinal Anesthesia 	BST SGD	Brig ® Mobasher Ahmed Saeed Dr Verdah Sabih	Should know
Learning Outcomes: <ul style="list-style-type: none"> Discuss the local and regional anesthesia techniques List the various techniques for regional anesthesia administration Choose appropriate type of anesthesia for various surgical procedures Discuss the pre-anesthesia workup required for regional/spinal anesthesia list the complications resulting from regional/spinal anesthesia Monitor the patient under regional/spinal anesthesia Method of Assessment: <ul style="list-style-type: none"> MCQs\SAQs\ OSCE 				
Day 3	Pain Relief <ul style="list-style-type: none"> Epidural Analgesia USG Guided Nerve Blocks 	BST SGD	Brig ® Imran Ul Haq Dr Muhammad Fareed Azam	Should know

	Multimodal Analgesia			
<p>Learning Outcomes:</p> <ul style="list-style-type: none"> • Relate different types of pain to its pathophysiology. • Outline various methods for pain relief in benign and malignant diseases • Discuss the various methods used for pain relief in different diseases • Take history of a patient with pain • Perform clinical examination of a patient with pain • Counsel the patient with pain <p>Method of Assessment:</p> <ul style="list-style-type: none"> • MCQs\SAQs\ OSCE 				
Day 4	<p>Pre anesthesia assessment:</p> <p>USG Guided CVP Insertion</p> <p>IV lines</p>	<p>BST</p> <p>SGD</p>	<p>Brig ®</p> <p>Mobasher</p> <p>Ahmed Saeed</p> <p>Dr Verdah</p> <p>Sabih</p>	Should know
<p>Learning Outcomes:</p> <ul style="list-style-type: none"> • Discuss pre anesthesia assessment and ASA scoring • Discuss indication, complication and monitoring of CVP line • Observe passage of CVP line • Calculate CVP of patient <p>Method of Assessment:</p> <ul style="list-style-type: none"> • MCQs\SAQs\ OSCE 				
Day 5	Assessment			

Neurosurgery

Days	Topics/Themes	Instructional strategies	Teacher Name	Must Know Should know Cloud Know
Day 1	Head Injury	BST SGD	Dr Mehboob Alam Dr Sohail	Must know

Learning Outcomes:

1. Correlate types of head injury to their pathophysiology and sign and symptoms
2. calculate the GLASSGOW COMA SCALE
3. Recognize signs in neurologically deteriorating patient.
4. Demonstrate the ABCDE approach and its relation to the avoidance of secondary neurological damage after head injury.
5. Discuss the surgical treatment and complications
6. Take history of a patient with head injury
7. Perform clinical examination of a patient with injury

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 2	SOL Brain & Brain Tumor Spinal Tumour	BST SGD	Dr Mehboob Alam Dr Sohail	Should know
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Learning Outcomes:

- State relative incidence and location of the major types of primary and secondary brain tumors and space occupying lesions
- Differentiate between clinical presentations of brain tumors based on their locations
- List the major differences between the diagnosis and management of brain tumors and abscesses.
- Describe the surgical indications for the most common benign and malignant tumors and also space occupying lesions of brain
- Take history of a patient with brain tumors and perform clinical examination of a patient with brain tumors
- Differentiate between various types of spinal tumors
- Develop a management plan

Method of Assessment:

- MCQs\SAQs\ OSCE, Short case

- Focused history and examination

Day3	Acute Lumbago Degenerative Spine Disease TB spine	BST SGD	Dr Mehboob Alam Dr Sohail	Should know
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Learning Outcomes:

- Differentiate between different types of low back pain based on signs and symptoms
- Develop management plan for a patient with a Lower back pain.
- Describe the pathogenesis and natural history of degenerative disease of spine.
- list appropriate diagnostic tools to interpret the results
- diagnose the patient problems using appropriate clinical examination and radiological studies.
- Device management plan
- Describe the etiology, epidemiology and pathophysiology of inflammatory infectious conditions of the spinal column.
- Suggest appropriate investigations and laboratory work up to establish case based differential diagnosis.
- Develop management plan
- Take history of a patient with backache and perform clinical examination of a patient with backache

Method of Assessment:

- MCQs\SAQs\ OSCE Short case
- Focused history and examination

Day 4	Hydrocephalus & Meningocele, meningomyelocele	BST SGD	Dr Mehboob Alam Dr Sohail	Should know
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Learning Outcomes:

- Describe the common symptoms, signs and management of hydrocephalus meningocele and meningomyeloceles
- Take history of a patient with Hydrocephalus & Meningocele
- Perform clinical examination of a patient with Hydrocephalus & Meningocele, meningomyelocele

Method of Assessment:

- MCQs\SAQs\ OSCE, Short case
- Focused history and examination

Orthopedics

Days	Topics/Themes	Instructional strategies	Teacher Name	Must Know Should know Cloud Know
Day 1	<ul style="list-style-type: none"> • Department orientation • Patient safety • Doctor safety • Orthopedics history 	SGD SDL BST	Dr. Sajid Ejaz Rao Dr. Muhammad Ikram	Should know
Learning Outcomes: <ul style="list-style-type: none"> • Take orthopedics patient history • Possess the knowledge of practice “patient safety protocols” as defined • Possess the knowledge of practice “student safety protocols” as defined Method of Assessment: <ul style="list-style-type: none"> • MCQs\SAQs\ OSCE • Short case • Focused history and examination 				
Day 2	<ul style="list-style-type: none"> • Operation theater protocol • Clinical Examination • Upper limb examination 	SGD SDL BST	Dr. Sajid Ejaz Rao Dr. Muhammad Ikram	Should know
Learning Outcomes: <ul style="list-style-type: none"> • Possess the knowledge of practice orthopedic operative room protocols • Identify and provide emergency first aid to a victim of upper limb fracture Method of Assessment: <ul style="list-style-type: none"> • Perform orthopedic clinical examination • MCQs\SAQs\ OSCE • Short case • Focused history and examination 				
Day 3	<ul style="list-style-type: none"> • Application of splint and Cast • Relevant investigation in orthopedics • Examination of lower limb 	SGD SDL BST	Dr. Sajid Ejaz Rao Dr. Muhammad Ikram	Should know
Learning Outcomes: <ul style="list-style-type: none"> • Identify and provide emergency first aid to a victim of lower limb fracture 				

- Order relevant investigations for the diagnosis and assessment of patients

Method of Assessment:

- MCQs\SAQs\ OSCE
- Short case
- Focused history and examination

Day 4	<ul style="list-style-type: none"> • Clinical assessment OSPE • Assessment of clinical examination • Student feedback 	<p>Dr. Sajid Ejaz Rao Dr. Muhammad Ikram</p>	<p>OSCE Short case Focused history and examination</p>
Day 5			

Radiology

Days	Topics/Themes	Instructional strategies	Teacher Name	Must Know Should Know Cloud Know
Day 1	Introduction to Radiology Machine, Radiation Protection, Radiation Protection Hands- on (X Ray & CT Scan X – Ray (Acquisition + Reporting)	SGD/Skill	Dr. Sobia Jawad Dr. Madiha Farhan	Should Know
<p>Learning Outcomes:</p> <ul style="list-style-type: none"> • Understand the basic functions and components of radiology machines, including X-ray and CT scanners. • Demonstrate knowledge of radiation safety protocols to protect patients and staff. • Apply hands-on skills for safe and accurate X-ray acquisition and reporting. <p>Method of Assessment:</p> <ul style="list-style-type: none"> • MCQs /OSCE 				
Day 2	Ultrasound Basics, Ultrasound (Acquisition + Reporting)CT Basics and Acquisition – CT (Acquisition+ Reporting)	SGD/Skill	Dr. Sobia Jawad Dr. Madiha Farhan Dr Nadia Gul Dr Naveeda Rauf	
<p>Learning Outcomes:</p> <ul style="list-style-type: none"> • Explain the principles and techniques of ultrasound imaging. • Conduct ultrasound and CT image acquisition with attention to patient safety and image quality. • Interpret and report findings from ultrasound and CT scans effectively. <p>Method of Assessment:</p> <ul style="list-style-type: none"> • MCQs /OSCE 				
Day 3	<ul style="list-style-type: none"> • Fluoroscopy Overview, Fluroscopy (Acquisition + Reporting), MRI Basic MRI (Acquisitions +Reporting) 	SGD/Skill	Dr. Sobia Jawad Dr Nadia Gul Dr Naveeda Rauf Dr. Madiha Farhan	

Learning Outcomes:

- Describe the fundamentals of fluoroscopy and MRI imaging and their clinical applications.
- Perform basic acquisition techniques in fluoroscopy and MRI with minimal supervision.
- Analyze and report on fluoroscopic and MRI images with accuracy.

Day 4	Advanced Imaging Techniques, Case Based Learning, Practical Skills Assessment, Feed Back & Q/A Session	SGD/Skill	Dr. Sobia Jawad Dr Nadia Gul Dr Naveeda Rauf Dr. Madiha Farhan
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Learning Outcomes:

- Integrate advanced imaging techniques in complex case assessments.
- Develop problem-solving skills through case-based learning.
- Demonstrate proficiency in practical imaging skills through hands-on assessment.

Day 5	Assessment
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Assignment on every Saturday

One seminar will be conducted in surgery and allied rotation

Learning Resource:

- Bailey & Love's (Short Practice of Surgery 28th Edition)

Reference Books:

- The Washington Manual of Surgery 7th Edition
- S.DAS, A manual on Clinical Surgery
- Browse's introduction to the symptoms & signs of surgical disease

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Dr. Nadia Gul	
Dr. Naveeda Rauf	
Dr. Sobia Jawad	
Dr .Madiha Farhan	

Assessment Formats

Assessment Strategies (Formative)	Assessment Strategies (Summative)
<ul style="list-style-type: none"> • MCQ's • Quiz • CBL • assignment 	<ul style="list-style-type: none"> • MCQ's • SAQs • CBL • Short case • Focused history and examination • Assignment

6. Rules & regulations:

I. Student's code of conduct

The Student Code of Conduct sets out the standards of conduct expected of students. It holds individuals and groups responsible for the consequences of their actions. Failure to fulfill these responsibilities may result in the withdrawal of privileges or the imposition of sanctions.

Wah Medical College is a community of students, faculty and staff involved in learning, teaching, research, and other activities. All members of the WMC community are expected to conduct themselves in a manner that contributes positively to an environment in which respect, civility, diversity, opportunity, and inclusiveness are valued, so as to assure the success of both the individual and the community. The Student Code of Conduct reflects a concern for these values and tries to ensure that members of the WMC can make use of and enjoy the activities, facilities, and benefits of WMC without undue interference from others.

WMC STUDENT CODE OF CONDUCT

- Discipline
- Decent dress
- Good Manners
- Smart Turn Out
- Healthy Activities
- No smoking
- No Abusive Language
- Cooperative Attitude
- Respect for All

II. Attendance policy

- a. Students are required to mark attendance for every class.
- b. The attendance is compiled by the respective department and submitted to student affairs by the 10th of each month.
- c. The Students Affairs Department will compile the absent report and a fine of Rs. 500/- for a lecture or for the whole day will be imposed on absent students. It is pertinent to mention here that a fine is imposed on students to compel them to attend classes regularly and not to generate the funds.
- d. A compiled attendance state of all students along with those having attendance less than 75% duly highlighted will be submitted to the Students Affairs Department on monthly as well as quarterly basis by the concerned departments.
- e. At the end of the academic year, a consolidated state of attendance of students will be submitted to the Students Affairs Department.
- f. Departments will submit the list of those students having attendance less than 75% at the end of academic year.
- g. Admission forms of students having attendance less than 75% will NOT be submitted to NUMS for appearing in Annual University Exams.

7. Study tips

Dear Students,

Becoming a doctor is a tough job, but you can make it easier for yourself by adopting some time-tested techniques or habits. It's never too early – or too late – to develop good study habits. The sooner you get into a good self-study pattern, the easier everything will be and the more your chances of getting good marks will improve. Here are our top tips for getting the most out of your self-directed study time. And remember **Perseverance is the Key to Success!**



Review the material regularly, create a study schedule

Write it down



Test yourself

Find an effective learning environment with limited distractions and some fresh air



MNEMONICS

Mnemonic is a learning technique to encode information so it can be recalled more easily.

Improve memorization with Mnemonics

Incorporate auditory methods; use online podcasts



Use visuals, images, concept maps & illustration charts

Consider forming a study group or find an accountability buddy



TAKE A STUDY BREAK!

Take strategic breaks

8. Feedback on the study guide

We value your feedback and will use it for improvement of this Study guide.

Kindly provide feedback for this study guide. At the email:

dme@wahmedicalcollege.edu.pk

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9. References:

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