

STUDY GUIDE SURGERY 4th Year

MBBS COURSE

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Mission Statement



Guiding your passion to profession

IMC Strives to improve health care in Faisalabad, our country and the world through excellence.

We seek to foster the development of dedicated clinicians, scientists, professionals and educators to provide leadership in education, services and discovery.

Vision:

To be an institution with

- An environment to develop creative free thinking and life long learners.
- A culture of objective research to transform health care delivery.
- Quality professional educational program based on innovation and collaboration.
- High moral and ethical values.
- Serving the needs of community in the best tradition of profession.

Goals:

- To develop humanist, skilled, intellectually disciplined and innovative medical professionals with dedication to those who they treat, lead and serve
- To educate and guide the next generation of leaders in healthcare and medical science to provide and sustain achievements in service, teaching and research.
- To provide comprehensive and effective patient centered, culturally sensitive, compassionate and innovative health care of highest quality to all.
- To recruit, develop and nurture and independent and academically outstanding community of faculty, student, trainees and staff, who each contribute to excellence in our missions.
- To promote professional and personal growth, productive, accountability, integrity and synergistic collaboration and synergy of faculty, students and staff

Independent Medical College, Faisalabad.
info@imc.edu.pk, www.imc.edu.pk

INTRODUCTION

WHAT IS A STUDY GUIDE?

It is an aid to:

- A. Inform students how student learning program of the subject has been Organized
- B. Help students organize and manage their studies throughout the year
- C. Guide students on assessment methods, rules and regulations

THE STUDY GUIDE:

- Communicates information on organization and management of the module.
- This will help the student to contact the right person in case of any difficulty.
- Defines the objectives which are expected to be achieved at the end of the program.
- Identifies the learning strategies such as lectures, small group teachings, clinical skills, Demonstration, tutorial and case based learning that will be implemented to achieve the Learning objectives.
- Provides a list of learning resources such as books, computer assisted learning program, web-links, and journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous and term test on the Student's overall performance.
- Includes information on the assessment methods that will be held to determine every student's Achievement of objectives.
- Focuses on information pertaining to examination policy, rules and regulations.

SURGERY FOR 4th YEAR MBBS

Subject: Principles of Surgery

Year: Fourth year

Duration: 36 weeks

Fourth year	25 hours Surgery 25 Hours Surgery Speciality	100 Hours (Surgery rotation 4 weeks) (Specialities rotation 4 weeks) 8 weeks clinical rotation (2 hours/week)
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AT THE END OF 4TH YEAR MBBS STUDENT WILL BE ABLE TO

- Take a focused history.
- Perform physical examination(s) in order to identify specific problems.
- Perform basic procedures with the consent of the patient, ensuring infection control.
- Medical and dental graduates must continually acquire new scientific knowledge and skills to maintain competence, and incorporate it into their day-to-day medical practice.
- Able to explain basic principles of surgery.
- Graduates should be able to demonstrate Communication Skills, when dealing with patients and their families, nurses, other health professionals, community, the general public and the media.

RULES AND REGULATION

- 75% attendance in theory and clinical classes in mandatory.
- All progress will be recorded on clinical log book.
- Pass marks for assessment will be 50%.
- All this will be credited in internal assessment for Final Professional.
- Any Conflict will be resolved by Co-Ordinator.
- All students will have to fill online feedback performa.

LEARNING RESOURCES

The department of Surgery will require following resources for implementation resources:

- Human resource
- Instructors (faculty members 8)
- Curriculum coordinator curriculum secretary
- Infrastructure
- Lecture hall with AV aids
- Tutorial room with AV aids
- Clinical skills Lab with manikins
- Simulated patients and simulated manikins
- Computers

LISTS OF CONTENT RESOURCES

- Short Surgical Practice Bailey & Love 28th edition
- Surgical Signs and Symptoms Norman Browse
- ATLS manual 9th edition
- Clinical examination systems by Muhammad Shuja Tahir
- Tell me the Answer Vol 1 and Vol 2 by Muhammad Shuja Tahir
- Trauma by Muhammad Shuja Tahir
- Breast Problem by Muhammad Shuja Tahir
- Thyroid Problems by Muhammad Shuja Tahir
- GIT Problems by Muhammad Shuja Tahir
- Urology by Muhammad Shuja Tahir
- Investigations by Muhammad Shuja Tahir
- Independent Review (H-2000) www.indepreview.com
- History Register
- Clinical Log book
- General Surgery (Lecture Notes Series) by Harold Ellis, Roy Calne, Chris Watson
- An Introduction to the Symptoms and Signs of Surgical Disease by Norman Browse
- Current Surgical Practice: by Norman L. Browse, Alan G. Johnson, and Tom. Vol. 6
- Schwartz's Principles of Surgery by F. Charles Brunnicardi, Dana K. Andersen, Timothy R. Billiar, and David L. Dunn 8th edition. 2004

CLINICAL LOG BOOK AND HISTORY REGISTER

E-LEARNING

- e-IMC phone app for online lectures
- IMC youtube channel

JOURNALS

- The Professional Medical Journal
- Independent Review (H-2000)
- Independent Journal of Allied Health Sciences
- Online Journals and Reading Materials through HEC Digital Library Facility

LEARNING METHODOLOGY

The following teaching / learning methods are used to promote better understanding:

- Interactive Lectures
- Hospital / Clinic visits
- Small Group Discussion
- Case- Based Learning
- Skills session
- E-Learning
- Self-Directed Study

INTERACTIVE LECTURES: In large group, the lecturer introduces a topic or common clinical conditions and Explains the underlying phenomena through questions, pictures, videos of patients' interviews, Exercises, etc. Students are actively involved in the learning process.

SMALL GROUP DISCUSSION (SGD): This format helps students to clarify concepts acquire skills or attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials and self-study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

CASE- BASED LEARNING: A small group discussion format where learning is focused around a series of questions based on a clinical scenario. Students discuss and answer the questions applying relevant knowledge gained in clinical and basic health sciences during the module.

SKILLS SESSION: Skills relevant to respective module are observed and practiced where applicable in skills laboratory or Department of Physiotherapy.

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

E-LEARNING: E-Learning is a strategy by which learning occurs through the utilization of electronic media, typically the Internet. The basic aspects of medical professionalism and ethics will be addressed through an e-learning course

CLINICAL ROTATION: In small groups, students observe patients with signs and symptoms in hospital or Clinical settings. They will have opportunity to practice clinical skills. This helps students to relate knowledge of basic and clinical sciences of the relevant module.

ASSESSMENT

MCQ's and SEQ's

Multiple choice question and short essay question test will be used at the end of part of curriculum to assess the learning of knowledge. These all assessment exercises will be formative. The written tests like Multiple-Choice Questions (MCQs) and Short-Essay Questions (SEQs) test formats are used for the assessment of cognitive domain. The MCQs are more objective and essentially select type of item response format. MCQs have a cueing effect, which promotes guessing and leads to higher scores. In addition, writing MCQs of higher cognitive level of problem solving is challenging. On the contrary, the SEQs are more subjective and have a supply or construct type item response format, which does not have any cueing effect and can effectively assess problem solving skills(8).

OSCE AND SHORT CASE

Short case and OSCE will be used to evaluate clinical skills and procedural skills at the ward end of placement. The OSCE is a method of clinical skill assessment, and it has been reported to be appropriate for assessing learning achievement levels in the psychomotor and emotional domains, which are difficult to evaluate with written examinations(9).

CLINICAL LOG BOOK

Clinical log book is meant for self directed learning (SDL) and assessment of students. The clinical logbook includes reflection which helps the students to set educational goals.

MINI-CEX

Mini-CEX is used to assess the clinical skills and problem solving skills of medical students. This is the tool used by clinical teachers. This can assess all three domains, Psychomotor, cognitive and affective. This also used as formative assessment.

Evaluation plan		
Term Test	Written test (MCQ and SEQ)	Formative
After 8 weeks of ward placement	Ward test (OSCE and short case)	Formative

INTERNAL ASSESSMENT

- i. The weightage of internal assessment shall be 10% of totals marks.
- ii. Continuous internal assessment shall consist of evaluation at the end of each assignments, e.g. stages/ sub-stage, class tests etc., attitudinal assessment from educational supervisors.
- iii. Assessment of knowledge, Skills and Attitude shall contribute toward internal assessment. Methods used to assess these domains shall include Multiple Choice Questions of one-best type, Short essay questions, Oral/Viva, and Practical/Clinical examinations.
- iv. The score of internal assessment shall contribute to the score in the final examination, Final university examination of each subject shall contribute 90 to total score, and the candidate shall pass in aggregate.
- v. Proper record of continuous internal assessment shall be maintained.

LECTURE SCHEDULE 4TH Year MBBS SURGERY

No	Date	Topic	Module	Term	Teacher
FIRST TERM					
1		Benign Soft tissue lesions	Module 6		
2		Squamous cell carcinoma , basal cell carcinoma	Module 6		
3		Malignant melanoma	Module 6		
4		Lymphadenitis and lymphoma	Module 7		
5		Salivary gland swelling	Module 7		
6		Goitre	Module 7		
7		Tumors Of Thyroid	Module 7		
8		Benign Breast Diseases	Module 8		
9		Carcinoma Breast	Module 8		
10		Breast abscess	Module 8		
TERM TEST 1 MCQ test 100 MCQ, s					
SECOND TERM					
11		Small bowel tumors	Module 11		
12		Diverticular disease	Module 11		
13		Colorectal carcinoma	Module 11		
14		Ulcerative colitis and chrons disease	Module 11		
15		Diverticular disease	Module 11		
16		Carcinoma esophagus and	Module 11		
17		Carcinoma stomach	Module 11		
18		Intestinal tuberculosis	Module 11		
19		Appendicitis	Module 11		
20		Small bowel obstruction	Module 11		
TERM TEST 2 MCQ test 100 MCQ, s					
THIRD TERM					
21		Cholelithiasis	Module 10		
22		Obstructive jaundice	Module 10		
23		Tumors of biliary tract	Module 10		
24		Pancreatic diseases	Module 10		
25		Splenomegaly	Module 10		
26		Renal Tumours	Module 13		
27		Prostatic diseases	Module 13		
28		Testicular tumor	Module 13		
29		Bladder tumor	Module 13		
30		Brain tumor	Module 14		
TERM TEST 2 MCQ test 100 MCQ, s					

CLINICAL ROTATION SCHEDULE

Department	Surgery
Class	Fourth Year
Duration of course	8 weeks
Educational hours	100 hours (2 hours daily, 12 hours weekly)
Location	Ward, OPD, Tutorial room
Tutors	Assistant professor, associate Professor, Professor

	Ward	C	P	A	% age	Assessment
Week 1	Examination of ulcer Examination of swelling Neck swelling	C2 C2 C3	P2 P2	A2 A2	15	Ward test Mini CEX OSPE
Week 2	Abdominal examination Digital rectal examination Abdominal Pain	C2 C2 C3	P2 P2	A2 A2	15	Ward test Mini CEX OSPE
Week 3	Inguinal examination Scrotal examination LUTS Hematuria	C2 C2 C3 C3	P2 P2	A2 A2	15	Ward test Mini CEX OSPE
Week 4	Chest examination Breast examination Jaundice	C2 C2 C3	P2 P2	A2 A2	15	Ward test Mini CEX OSPE
Week 5	Examination of neck Thyroid examination dysphagia	C2 C2 C3	P2 P2	A2 A2	10	Ward test Mini CEX OSPE
Week 6	Arterial examination Venous examination Diabetic foot examination Ischemic limb	C2 C2 C3 C3	P2 P2	A2 A2	10	Ward test Mini CEX OSPE
Week 7	Orthopedics Examination of upper limb joint	C2 C2 C2	P2 P2 P2	A2 A2 A2	10	Ward test Mini CEX OSPE
Week 8	Orthopedics Examination of upper limb joint	C2 C2	P2 P2	A2 A2	10	Ward test Mini CEX OSPE

Evaluation:

- Attendance of 75% is mandatory
- 15 clinical histories must be completed on history register
- Every Saturday will be formative assessment for course work of that week
- End of course work will be ward test
- Ward test will be OSPE and 2 short cases.
- All students will bring their examination kit & clinical examination manual during clinical rotation.

Modules	Objectives	Instructional strategy				Assessment			
		Lecture	Ward	SGD	Skill	MCQ	SEQ	OSPE	SC & LC
Module 6 Skin and soft Tissue (plastic Surgery)	Explain various benign skin and subcutaneous tumors	••				••	••		••
	To discuss management of malignant skin tumors	••				••	••	••	••
	To demonstrate how to assess burn patients		••	••		••	••		
	To describe calculation & quality of IV fluids in burns		••	••		••	••		
	Explain management of burn patient & complications	••				••	••		
	To examine lumps and ulcers		••		••			••	••
	describe pathophysiology of burn	••				••	••		
	To discuss various skin grafts and their use	••				••	••		
	To describe principles and uses of flaps	••				••	••	••	
	To explain steps of reconstruction ladder	••		••		••	••		
Module 7 Head & neck and thyroid diseases	Explain the triangles and zones of neck	••				••	••		
	Describe salivary gland diseases	••				••	••		
	Assess patients with thyroid swelling	••				••	••		••
	Plan management of thyroid diseases		••	••		••	••		••
	Discuss congenital swellings of neck					••	••		
	Examine neck and thyroid gland		••		••			••	••
	Investigate neck swelling		••	••	••	••			
	Interpret thyroid function tests	••		••		••		••	
	Discuss parathyroid gland pathologies	••				••			
	Describe MEN I and MEN II	••				••			
	Discuss Management of pheochromocytoma	••				••			
	Explain complications of thyroid surgery	••	••					••	••

Modules	Objectives	Instructional strategy				Assessment			
		Lecture	Ward	SGD	Skill	MCQ	SEQ	OSPE	SC & LC
Module 8 Breast Disease	Describe the anatomy of breast and axilla	••		••		••		••	
	Demonstrate physical examination of breast		••		••			••	••
	Explain triple assessment	••	••	••	••		••	••	••
	Outline management plan for diseases of breast	••	••	••		••	••	••	••
	Discuss pathology of carcinoma of breast	••		••		••	••	••	
	Explain management of carcinoma of breast	••	••	••		••	••	••	••
	Interpret mammography			••	••			••	
	Describe principles of breast screening	••				••	••		
	Explain principles of breast surgery		••	••				••	••
Module 9 Abdominal wall & hernias, peritoneum	Describe the anatomy of abdominal wall	••	••	••		••	••		
	Explain the causes of abdominal hernias	••	••	••		••			
	Demonstrate history and findings in hernia patients		••	••	••		••	••	••
	Outline management of hernias	••	••	••		••	••	••	••
	Enlist complications of hernia surgery	••	••	••		••	••		
	Explain causes and complications of peritonitis	••	••	••		••	••	••	
	Identify clinical features of peritonitis	••	••	••		••	••	••	••
	Describe the principles of management of peritonitis	••	••	••		••	••		
Module 10 Hepatobiliary, spleen and Pancreas	Explain basic anatomy of hepatobiliary system	••		••		••	••		
	Describe pathophysiology of gall stones	••		••		••	••		
	Perform Assessment of gall stone disease patient	••	••	••		••	••	••	••
	Outline management of gall stone disease	••	••	••		••	••	••	••
	Describe malignant diseases of biliary tract	••	••	••		••	••		••
	Describe assessment and management of pancreatitis	••	••	••		••	••	••	••
	Outline management of pancreatic carcinoma	••	••			••	••		••
	Describe common complications of splenectomy	••	••	••		••	••		
	Explain investigations of liver disease	••	••	••		••	••	••	••

Modules	Objectives	Instructional strategy				Assessment			
		Lecture	Ward	SGD	Skill	MCQ	SEQ	OSPE	SC & LC
Module 11 Gastrointestinal tract	Understands basic anatomy of Gastrointestinal tract	••		••		••	••		
	Explain management of diseases of esophagus	••	••	••		••	••	••	••
	Describe the investigations for upper GI diseases	••	••	••		••	••	••	••
	Outline management of GI bleed and gastric disorders	••	••	••		••	••	••	••
	Describe management of bowel obstruction	••	••	••	••	••	••	••	••
	Explain management of acute problems of GIT	••	••	••	••	••	••	••	••
	Describes management large bowel diseases	••	••	••		••	••	••	••
	Describes management of perianal and rectal diseases	••	••	••	••	••	••	••	••
	Describes management of appendicular diseases	••	••	••		••	••	••	••
Module 12 Vascular diseases	Describe the features of peripheral vascular disease	••	••	••		••	••		
	Demonstrate assessment of ischemic limb	••	••	••	••	••	••	••	••
	Outline management of limb ischemia	••	••	••		••	••	••	••
	Describe diagnosis and management of Aneurysms	••	••			••	••		
	Explain the assessment of varicose veins	••	••	••		••	••	••	••
	Outlines principles of management of venous diseases	••	••	••		••	••	••	
	Describe diagnosis and management of DVT	••	••			••	••		
	Describes management of carotid artery disease	••	••			••	••		
Module 13 Urological disease	Describe physiology of urinary tract stone disease.	••	••			••	••		
	Explain management of urinary tract stone disease.	••	••	••		••	••	••	••
	Describe management of bladder outlet obstruction.	••	••	••		••	••	••	••
	Outline principles of management of renal mass.	••	••	••		••	••	••	••
	Describe lower urinary tract symptoms.	••	••	••		••	••	••	••
	Explain evaluation of patient with hematuria.	••	••	••		••	••	••	••
	Describe management of patient with scrotal swelling.	••	••	••		••	••	••	••
	Identify steps of circumcision.	••	••			••	••		
	Interpret IVU, Renal scan & CT-Urogram.	••	••			••	••		



INDEPENDENT MEDICAL COLLEGE

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4th Year WEEKLY TIME TABLE 20-21

Time	Practical 08:00-09:30	Ward 09:30-11:30	Lecture 11:30-12:15	Lecture 12:15-01:00	Lecture 01:15 to 02:00	Evening Duty 05:00 to 06:30
Mon	A1 - B1 Pathology C1 - D1 Pathology A2 - B2 Community Medicine C2 - D2 Community Medicine	Ward Rotation	EYE	Pathology	Surgery	
Tue	A2 - B2 Pathology C2 - D2 Pathology A1 - B1 Community Medicine C1 - D1 Community Medicine	Ward Rotation	ENT	Pathology	Community Medicine	Ward Duty
Wed	A1 - B1 Pathology C1 - D1 Pathology A2 - B2 Community Medicine C2 - D2 Community Medicine	Ward Rotation	Community Medicine	ENT	Pathology	
Thu	A2 - B2 Pathology C2 - D2 Pathology A1 - B1 Community Medicine C1 - D1 Community Medicine	Ward Rotation	Community Medicine	Pathology	EYE	Ward Duty
Fri	08:00-08:45 Lecture Medicine 08:45-09:30 Lecture Obs & Gynae.	09:30-10:30 Ward Rotation	10:30-11:15 ENT	11:15-12:00 Pediatrics		Ward Duty
Sat	09:00-10:00 (Online) Pathology Lecture 10:00-11:00 (Online) Community Medicine	11:00-12:00 (Online) ENT	12:00-01:00 (Online) EYE			