STUDY GUIDE SURGERY 3RD Year

MBBS COURSE

Contents

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

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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 3rd YEAR MBBS

Subject: Principles of Surgery
Year: Third year
Duration: 36 weeks

Third year	30 hours 36 lectures (1/week)	100 hours 8 weeks clinical rotation (2 hours/week)

AT THE END OF 3RD 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 creadited in internal assessment for Final Professional.
- Any Conflict will be resolved by Co-Ordinator.
- All students will have to fill online feedback perfroma.

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 Brunicardi, 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 orClinical 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, Pyschomotor, 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 axaminations.
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 3rd Year MBBS SURGERY

No	Date	Topic	Module	Term	Teacher
FIRST TERM					
1		Wounds, types of wound	Module 1		
2		Wound healing and factors affecting	Module 1		
3		Management of wounds	Module 1		
4		Abnormalities of wound healing	Module 1		
5		Surgical site infections, types	Module 1		
6		SIRS , bacteremia ,factors to prevent SSI	Module 1		
7		Abscess, cellulitis, necrotizing fasciitis	Module 1		
8		Gas gangrene, tetanus	Module 1		
9		Common antibiotics, Rationale use of antibiotics	Module 1		
TERM TEST 1 MCQ test 100 MCQ, s					
SECOND TERM					
10		Shock And Types	Module 2		
11		Blood and Products ,Transfusion And complications	Module 2		
12		Nutrition	Module 2		
13		Fluid Balance	Module 2		
14		Potassium balance & sodium balance	Module 2		
15		Acid base balance	Module 2		
16		Anesthesia and types	Module 3		
17		General and regional anesthesia	Module 3		
18		Peri operative care (pre, intra and post op)	Module 3		
19		Pain management and analgesic ladder	Module 3		
TERM TEST 2 MCQ test 100 MCQ, s					
THIRD TERM					
20		Diagnostic imaging in surgery	Module 4		
21		Tissue diagnosis	Module 4		
22		Surgical terms fistula / sinus / hernia	Module 4		
23		Neoplasia, Staging and grading of tumor	Module 5		
24		Tumor markers	Module 5		
25		Principles of chemotherapy	Module 5		
26		Principles of radiotherapy	Module 5		
27		Principles of transplantation	Module 5		
28		ATLS introduction	Module 15		
29		Primary and secondary survey	Module 15		
TERM TEST 2 MCQ test 100 MCQ, s					

CLINICAL ROTATION SCHEDULE

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

	Ward	C	P	A	% age	Assessment
Week 1	History taking common surgical symptoms Examination of wound/ulcer Examination of lump	C2 C2	P1 P1	A1 A1	15	Ward test Mini CEX OSPE
Week 2	Examination of neck Examination of thyroid gland Examination breast	C2 C2	P1 P1	A1 A1	15	Ward test Mini CEX OSPE
Week 3	Examination of groin hernia Examination of abdomen Examination of abdomen	C2 C2	P1 P1	A1 A1	15	Ward test Mini CEX OSPE
Week 4	Examination of abdominal lump DRE and proctoscopy General physical examination	C2 C2	P1 P1	A1 A1	15	Ward test Mini CEX OSPE
Week 5	Examination of peripheral vascular system Examination of varicose veins Examination of diabetic foot	C2 C2	P1 P1	A1 A1	10	Ward test Mini CEX OSPE
Week 6	Examination scrotal swelling Assessment of prostate Examination of chest Examination of chest	C2 C2	P1 P1	A1 A1	10	Ward test Mini CEX OSPE
Week 7	Examination of CNS Examination of CNS Examination of peripheral nerves Examination of peripheral nerves	C2 C2 C2	P1 P1 P1	A1 A1 A1	10	Ward test Mini CEX OSPE
Week 8	Examination of upper limb joints Examination of lower limb joints ATLS principles Primary and secondary survey	C2 C2 C2	P1 P1 P1	A1 A1 A1	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 1 Wounds & Surgical Infections	To explain normal healing and factors affecting	••				••	••		
	To describe management of wounds		••	••		••	••		
	To identify types and classification of wounds		••			••	••		
	To discuss abnormalities of healing	••				••	••		
	To differentiate between acute and chronic wounds	••						••	••
	To perform clinical assessment of wound		••						••
	To describe surgical site infection and types	••				••	••		
	To explain the common surgical infections	••				••	••		
	To discuss the indications and choice of antibiotics	••		••		••	••		
	To appreciate the importance of asepsis and antisepsis	••		••		••	••		
	To define sepsis, SIRS and bacteremia					••	••		
	To describe the management of Surgical site infection		••	••		••	••	••	
Module 2 Surgical Physiology	To describe metabolic response to injury	••				••	••		
	To explain changes in physiology due to surgical trauma	••				••	••		
	To describe pathophysiology of shock	••				••	••		
	To identify different types of shock	••	••			••	••		
	Describe principles & priorities of resuscitation in shock	••				••	••		
	To describe use of blood and blood products	••				••	••	••	
	To discuss benefits and risks of blood transfusion	••				••	••	••	
	Describe fluid and electrolyte requirement and therapy	••				••	••		
	To explain nutritional assessment of surgical patient	••	••			••	••		
	To explain different methods of nutritional support	••		••		••	••		
	To perform IV access		••		••			••	
Module 3 Critical care anesthesia	To describe preoperative preparation of surgery	••				••	••		
	To explain techniques of anesthesia	••				••	••		
	To demonstrate techniques for airway maintenance				••			••	
	To explain methods of pain management	••				••	••		
	To discuss pharmacology of anesthetic drugs	••				••	••		
	To describe intraoperative and post-operative care			••		••	••		
	To describe spectrum of Day Surgery	••							
Module 4 Diagnostics and surgical technology	To describe principles of different imaging	••				••	••	••	
	To discuss merits and demerits of different imaging	••				••	••		
	To explain principles of radiation protection	••				••	••		
	To explain principles of microscopic diagnosis	••				••	••		
	To discuss merits and demerits of biopsy techniques	••		••	••	••	••		
	To explain tumor markers and their uses	••				••	••		
	To describe basics of endoscopy & MIS	••				••	••		

Modules	Objectives	Instructional strategy				Assessment			
		Lecture	Ward	SGD	Skill	MCQ	SEQ	OSPE	SC & LC
Module 5 Principles of Oncology	To explain biological nature and spread of cancer	••				••	••		
	To describe principles of staging and grading	••	••			••	••	••	
	To discuss the importance of tumor markers	••				••	••		
	To describe principles of surgical treatment	••		••		••	••		
	Explain principles of non-surgical treatment of cancer	••				••	••		
	To discuss palliative care and end of life care	••		••		••	••		

INDEPENDENT MEDICAL COLLEGE

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3rd Year
WEEKLY TIME TABLE 20-21

Time	Lecture 08:00-08:45	Lecture 08:45-09:30	Ward 09:30-11:00	Practical 11:00-12:15	Lecture 12:15-01:00	NAMAZ BREAK	Lecture 01:15 to 02:00	Evening Duty 05:00 to 06:30
Mon	Behavioral Sciences	Pharmacology	Ward Rotation	A1 / A2 Pathology B1 / B2 Pharma C1 / C2 Forensic	Pathology		Forensic Medicine	Ward Duty
Tue	Pathology	Pharmacology	Ward Rotation	A1 / A2 Pharma B1 / B2 Forensic C1 / C2 Pathology	Behavioral Sciences		Medicine	
Wed	Forensic Medicine	Pathology	Ward Rotation	A1 / A2 Forensic B1 / B2 Pathology C1 / C2 Pharma	Eye		Pharmacology	Ward Duty
Thu	Forensic Medicine	Pharmacology	Ward Rotation	A1 / A2 Pathology B1 / B2 Pharma C1 / C2 Forensic Med	Pathology		Self Directed Learning	
Fri	Pathology	Forensic Medicine	09:30-10:15 Pharmacology 10:15-11:00 Community Med	A1 / A2 Pharma B1 / B2 Forensic Med C1 / C2 Pathology			Self Directed Learning	
Sat	Surgery	Forensic Medicine	Ward Rotation	A1 / A2 Forensic Med B1 / B2 Pathology C1 / C2 Pharma	Pathology		Pharmacology	