



كلية الطب
وحدة ضمان الجودة



Faculty of Medicine
Quality Assurance Unit

MASTER (MSC) DEGREE PROGRAM AND COURSES SPECIFICATIONS FOR GENERAL SURGERY

(According to currently applied **Credit** points **bylaws**)

Department of General Surgery

Faculty of medicine

Assiut University

2021-2022/2022-2023

Contents	
Item	Page
Program Specification For General surgery years 2021-2022/2022-2023	
A. Basic Information	4
B. Professional Information	5
Program aims Intended learning outcomes (ILOs) for the whole program Program academic standards Program external references Program structure and contents Courses contents (Annex 1) Admission requirements Progression and completion requirements Assessment methods and rules Program evaluation Declaration	
- Annex 1, Courses specifications	22
Basic science courses	
First Part	
Course 1 Surgical Pathology and Microbiology Unit {Module)1 (Surgical Pathology) Unit {Module)2 (Microbiology)	23
Course 2 Surgical Anatomy and Pharmacology Unit{Module) 1(Surgical Anatomy) Unit {Module)2(Pharmacology)	33
Course 3 General Surgery 1	47
Speciality Course	
1) Course 4 General Surgery 2 Unit (Module) 1 GIT Surgery. Unit (Module) 2 Breast and Endocrine Surgery. Unit (Module) 3 Maxillofacial and neck Surgery. Unit (Module) 4 Abdominal wall ,Hernias , Testis and Scrotal Surgery Unit (Module) 5 cardiothoracic Surgery Unit (Module) 6 Vascular Surgery. Unit (Module)7 Plastic Surgery	59

- Annex 2, Program academic standards	99
- Annex 3, Teaching methods	103
- Annex 4, Assessment methods	106
- Annex 5, Program evaluation tools	110
- Annex 6 Program matrixes: I-General Academic reference standards(GARS) for postgraduates versus Program ARS 1-Graduate attributes 2-Academic Standards II-Program ARS versus program ILOs III- Program Matrix.	112
- Annex 7, Additional information.	132



Assiut University
Faculty of Medicine
Quality Assurance Unit (QAU)



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Master degree of General Surgery

A. Basic Information

- + **Program Title:** Master degree of General surgery.
- + **Nature of the program:** Single.
- + **Responsible Department:** Department of General Surgery- Faculty of Medicine- Assiut University.
- + **Program Academic Director (Head of the Department):**
Prof. Mostafa Hamed
- **Coordinator (s):**
Principle coordinator: Dr. Mohamed Safwat shaheen
Assistant coordinator (s) Dr. Nagm Eldin Abou Elnaga Ahmed
- + **Internal evaluators:**
Prof. Abdelmonaem El-khadeeb
Prof. Abdel Rady Abdel Salam.
- + **External evaluator:**
Prof. Alaa Radwan. Sohag University.
Prof. Abobakr Mohie El-dien, Minia University
- + **Date of Approval by the Faculty of Medicine Council of Assiut University:** 23 / 9 /2014
- + **Date of most recent approval of program specification by the Faculty of Medicine Council of Assiut University:** 27-11-2022
- + **Total number of courses:** 4 courses
 - First part: 3 courses
 - Second part: 1 course

B. Professional Information

1- Program aims

1/1. To enable candidates to Acquire satisfactory level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in the area of General Surgery and enabling the candidates of making appropriate referrals to a sub-specialist.

1/2. Provide candidates with fundamental knowledge and skills of dealing with critically ill patients, with General Surgery diseases.

1/3. To introduce candidates to the basics of scientific medical research.

1.4. Enable candidates to start professional careers as specialists in Egypt but recognized abroad.

1.5 To enable candidates to understand and get the best of published scientific research and do their own .

2- Intended learning outcomes (ILOs) *for the whole program*:

2/1 Knowledge and understanding:

- A. Explain the essential facts and principles of relevant basic sciences including, Surgical Anatomy, Surgical Pathology, Microbiology, Pharmacology related to General Surgery.
- B. Mention essential facts of clinically supportive sciences related to General Surgery.
- C. Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of common diseases and situations related to General Surgery.
- D. Give the recent and update developments in the pathogenesis, diagnosis, prevention and treatment of common diseases related to General Surgery.

- E. Mention the basic ethical and medicolegal principles relevant to the General Surgery.
- F. Mention the basics of quality assurance to ensure good clinical care in the field of practice.
- G. Mention the ethical and scientific principles of medical research.
- H. State the impact of common health problems in the field of General Surgery on the society.

2/2 Intellectual outcomes

- A. Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the General Surgery.
- B. Demonstrate an investigatory and analytic thinking approach (problem solving) to common clinical situations related to General Surgery.
- C. Design and present case for common problem related to General Surgery.
- D. Formulate management plans and alternative decisions in different situations in the field General Surgery.

2/3 Skills

2/3/1 Practical skills (Patient Care)

- A. Obtain proper history and examine patients in caring and respectful behaviors.
- B. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment for common conditions related to General Surgery.
- C. Carry out patient management plans for common conditions related General Surgery.

- D. Use information technology to support patient care decisions and patient education in common clinical situations related to General Surgery.
- E. Perform competently non invasive and invasive procedures considered essential for General Surgery.
- F. Provide health care services aimed at preventing health problems related to General Surgery.
- G. Provide patient-focused care in common conditions related to General Surgery, while working with health care professionals, including those from other disciplines
- H. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records)

2/3/2 General skills

Including:

- Practice-based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-based Practice

Practice-Based Learning and Improvement

- A. Perform practice-based improvement activities using a systematic methodology (share in audits and use logbooks).
- B. Appraises evidence from scientific studies.
- C. Conduct epidemiological Studies and surveys.
- D. Perform data management including data entry and analysis.
- E. Facilitate learning of students and other health care professionals.

Interpersonal and Communication Skills

- F. Maintain therapeutic and ethically sound relationship with patients.
- G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.
- H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.
- I. Work effectively with others as a member of a health care team or other professional group.

Professionalism

- J. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society
- K. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices
- L. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

Systems-Based Practice

- M. Work effectively in relevant health care delivery settings and systems.
- N. Practice cost-effective health care and resource allocation that does not compromise quality of care.
- O. Assist patients in dealing with system complexities.

3- Program Academic Reference Standards (ARS) (Annex 2)

Academic standards for master degree in General Surgery

Assiut Faculty of Medicine developed master degree programs' academic standards for different clinical specialties.

In preparing these standards, the General Academic Reference Standards for post graduate programs (GARS) were adopted. These standards set out the graduate attributes and academic characteristics that are expected to be achieved by the end of the program. These standards were approved by the Faculty Council on 17-6- 2009. These standards were revised and approved without changes by Faculty Council on 23-9-2014. These standards were re- revised and approved without changes by the Faculty Council on 27- 11- 2022.

4- Program External References (Benchmarks)

1. ACGME (Accreditation Council for Graduate Medical Education).

http://www.acgme.org/acWebsite/navPages/nav_Public.asp

2. University of Michigan Health System, General Surgery Fellowship Program

(<http://surgery.med.umich.edu/general>)

Comparison between program and external reference		
Item	Master Degree for General Surgery	University of Michigan Health System General Surgery Clinical Fellowship Program
Goals	Matched	Matched
ILOS	Matched	Matched
Duration	3-5 years	5 years
Requirement	Different	different
Program structure	Different	different

A. Duration of program: 3 – 5 years

B. Structure of the program:

Total number of credit point: 180 (20 out of them for thesis)

Didactic 40 (22.2 %), practical 120 (66.7 %), thesis 20 (11.1%) total 180

First part

Didactic 14 (35 %), practical 24 (60 %), elective course 2 CP (5%), total 40

Second part

Didactic 24 , (20% %) practical 96 (80 %) total 120

According the currently applied bylaws:

Total courses 160 credit point ``

Compulsory courses: 98.75%

Elective course: 2 credit point =1.25%

	Credit Points	% from total
Basic science courses	24	13.3%
Humanity and social courses	2	1.1%
Speciality courses	134	74.5%
Others (Computer, ...)		
Field training	120	66.7%
Thesis	20	11.1%

C. Program Time Table

A. Duration of program 3 years maximally 5 years divided into

○ **Part 1: (One year)**

Program-related basic science courses and ILOs

Students are allowed to sit the exams of these courses after 12 months from applying to the MSc degree.

- One elective course can be set during either the 1st or 2nd parts.

○ **Thesis**

For the M Sc thesis;

MSc thesis subject should be officially registered within 6 months from application to the MSc degree,

Discussion and acceptance of the thesis could be set after 12 months from registering the MSc subject;

It should be discussed and accepted before passing the second part of examination)

○ **Part 2 (2 years)**

Program –related speciality courses and ILOs

Students are not allowed to sit the exams of these courses before 3 years from applying to the MSc degree.

The students pass if they get 50% from the written exams and 60% from oral and clinical/practical exams of each course and 60% of summation of the written exams, oral and clinical/practical exams of each course

Total degrees 1900 marks.

700 marks for first part

1200 for second part

Written exam 40% - 70%.

Clinical/practical and oral exams 30% - 60%.

D. Curriculum Structure: (Courses):

As mentioned above

Curriculum Structure: (Courses / units/ rotations):

Year 1

The first year of the fellowship is primarily for basic science related medical knowledge (studied in specialized courses over 6-12 months in collaboration with basic sciences departments of Assiut Faculty of Medicine) and a clinical year during which the fellows gain experience with a wide variety of patients in inpatient and outpatient settings, develop proficiency in the performance and appropriate utilization of various procedures. Throughout the year, emphasis is placed on developing: 1) an understanding of basics of General Surgery, preoperative postoperative care. 2) The ability to efficiently formulate clinical assessments and therapeutic plan for different General Surgical diseases. 3) The ability to critically analyze the relevant medical literature; and 4) skills in communicating with nursing and medical staff as well as house staff.

The first year fellow spends the year rotating among four different services: 1) General Surgery department at Assiut University Hospital; 2) Trauma unit at Assiut University Hospital; 3) Operative Theater unit for General Surgery at Assiut University Hospital; 4) Out patient clinic of General Surgery, Assiut University Hospital.

Years 2

Although the primary focus of the second and third year is the development of skills and experience in research, senior fellows continue to participate in clinical activities and certain procedures. First, they maintain their longitudinal outpatient and inpatient clinic experience throughout these years. Senior fellows will also actively participate in the regular weekly scientific seminars and collaborate with those fellows in their first year.

Approximately by the end of the first year, fellows are expected to identify a research area in which the subsequent two years will be focused. Together, the trainee and supervisors develop a project for investigation that is of interest to the trainee and within the expertise of the faculty member; in certain instances, joint mentorship provided by two faculty members within the Division, or by one divisional faculty member and a collaborator from another unit, is appropriate. By the beginning of the second year, the fellow presents a conference in which he/she synthesizes existing knowledge, presents the problem for investigation, and describes the proposed plan of investigation. The faculty members and fellows in attendance provide feedback to the fellow and supervisors about the proposed project; this process of peer review provides a useful experience for the fellow and often strengthens the experimental approach.

During the second and third years, the trainee carries out the proposed work in the clinical research facilities of the faculty mentor(s). The trainee also benefits from interactions with other trainees, technicians, and collaborating investigators. The trainee also participates in laboratory meetings and journal clubs specific to individual research groups. Presenting research findings at regional and national meetings and submitting work for publication are both important aspects of the investigative endeavor. The trainee will receive guidance and specific assistance in learning to prepare data for oral and written presentation, to prepare graphics, and to organize talks and prepare slides. Throughout the two-year research training period, it is anticipated that the fellow will assume increasing intellectual responsibility and technical independence.

Research Pathway

Selection of a research project and supervisors is subject to the approval of the General Surgery Department council approval and vice-Dean of post graduate studies of the faculty as officially regulated. Fellows may elect either clinically or epidemiologically -based research training pathways. For all Master degree students, a research advisory committee will be selected by the fellow based on the approved regulatory rules of the faculty council. This committee will monitor the progress of research fellows and provide advice regarding research training and career development

✚ Courses of the program:

Courses and student work load list	Course Code	CREDIT POINT		
		Lectures	Training	total
First Part				
Basic science courses (8CP)				
1. Course 1				4
Unit {Module) 1 (Surgical Pathology)	SUR 211A#	2	-	
Unit {Module) 2 (Microbiology)		2	-	
2. Course 2				4
Unit {Module) 1(Surgical Anatomy)	SUR211B#	2	-	
Unit {Module) 2(Pharmacology)		2	-	
General clinical compulsory courses (6 points)	SUR211C			
Course 3: General Surgery 1		6	-	6
Elective courses*		2CP		
Clinical training and scientific activities:				
Clinical training in General Clinical compulsory courses (10 CP)				
General Surgery 1			10	10
Clinical training and scientific activities in Speciality course (14 CP)			14	14
Total of the first part		16	24	40

Second Part	Speciality courses 24 CP Speciality Clinical Work 96 CP		
Speciality courses 1) Course 4 General surgery 2	SUR211D	24	
Training and practical activities in speciality (96 CP)	SUR211D	96	
Total of the second part		24	96
Thesis	20 CP		
Total of the degree	180		

* Elective courses can be taken during either the 1st or 2nd parts.

Student work load calculation:

Work load hours are scheduled depending on the type of activities and targeted competences and skills in different courses

Elective Courses#:

- Medical statistics.
- Evidence based medicine.
- Medicolegal Aspects and Ethics in Medical Practice and Scientific Research
- Quality assurance of medical education
- Quality assurance of clinical practice.
- Hospital management

One of the above mentioned courses are prerequisites for fulfillment of the degree.

Thesis:

20 CP are appointed to the completion and acceptance of the thesis.

General Surgery 2 Course

Units' Titles' list	% from total Credit point and total Marks
1) Module 1 "GIT Surgery"	50 %
2) Module 2 "Breast and Endocrine Surgery"	20%
3) Module 3 "Maxillofacial and neck Surgery "	5%
4) Module 4 "Abdominal wall ,Hernias , Testis and Scrotal Surgery"	10%
5) Module 5 "cardiothoracic Surgery"	5%
6) Module 6 "Vascular Surgery".	5%
7) Module 7 "Plastic Surgery".	5%
Total hours of Units (Modules)	100%

6. Courses Contents (Annex 1)

The competency based objectives for each course/module/rotation are specified in conjunction with teaching/training methods, requirements for achieving these objectives and assessment methods.

See Annex 1 for detailed specifications for each course/module

7-Admission requirements

 Admission Requirements (prerequisites) if any :

I. General Requirements:

II. General Requirements:

- a. MBBCh Degree form any Egyptian Faculties of Medicine
- b. Equivalent Degree from medical schools abroad approved by the Ministry of Higher Education

III. Specific Requirements:

- Fluent in English (study language)

VACATIONS AND STUDY LEAVE

The current departmental policy is to give working residents 2 week leave prior to first/ second part exams.

FEES:

As regulated by the postgraduate studies rules and approved by the faculty vice dean of post graduate studies and the faculty and university councils.

8-Progression and completion requirements

- + Examinations of the first part could be set at 12 months from registering to the MSc degree.
- + Examination of the second part cannot be set before 3 years from registering to the degree.
- + Discussion of the MSc thesis could be set after 1 year from officially registering the MSc subject before setting the second part exams.
- + The minimum duration of the program is 3 years.

The students are offered the degree when:

1. Passing the exams of all basic science, elective and speciality courses of this program as regulated by the post graduates approved rules by the faculty council.
2. Completing all scheduled CP and log book (minimum 80%).
3. Discussion and acceptance of the MSc thesis.

9- Program assessment methods and rules (Annex IV)

Method	ILOs measured
Written examinations: Structured essay questions Objective questions: MCQ Problem solving	K & I
Clinical: Long/short cases OSCE	K ,I, P &G skills
Structured oral	K ,I &G skills
Logbook assessment	All
Research assignment	I &G skills

Weighting of assessments:

Courses	Course Code	Written Exam	Degree		Total
			Oral Exam *	Practical / Clinical Exam	
First part					
<u>Basic science courses:</u>					
1. Course 1 Unit {Module) 1 (Surgical Pathology) Unit {Module) 2 (Microbiology)	SUR 211A#	120	80		200
2. Course 2 Unit {Module) 1 (Surgical Anatomy) Unit {Module) 2 (Pharmacology)	SUR211B#	120	80		200
General Surgery 1	SUR211C	120	60	120	300
Total of first part					700
Second Part					
<u>Speciality Courses:</u>					
1) Course 4 General Surgery 2 PAPER 1 PAPER 2 PAPER 3 PAPER 4	SUR211D	600	300	300	1200
Total of the degree					1900
Elective course		50		50	100

* 25% of the oral exam for assessment of logbook

Total degree 1900

700 marks for first part

1200 for second part

Written exam 50% (600marks).

Clinical/practical and oral exams 50% (600 marks)

✚ Examination system:

➤ **First part:**

- Written exam 2 hours in surgical anatomy pharmacology + Oral exam
- Written exam 3 hours in surgical pathology and Microbiology + Oral exam.
- Written exam 3 hours in General Surgery 1 + Oral exam+ Clinical exam.

➤ **Second part:**

- Written exam 4 papers 3 hours for each in General Surgery 2 + Oral exam+ Clinical/practical exam.

➤ **Elective courses**

- Written exam one paper 1 hour in Elective course + Oral & Practical exam

10-Program evaluation

By whom	Method	sample
Quality Assurance Unit	Reports Field visits	#
External Evaluator (s):According to department council External Examiner (s): According to department council	Reports Field visits	#
Stakeholders	Reports Field visits Questionnaires	#
Senior students	Questionnaires	#
Alumni	Questionnaires	#

#Annex 5 contains evaluation templates and reports (Joined in the departmental folder).

11-Declaration

We certify that all of the information required to deliver this program is contained in the above specification and will be implemented.

All course specifications for this program are in place.

Contributor	Name	Signature	Date
Program Principle Coordinator:			
Head of the Responsible Department (Program Academic Director):			

Annex 1, Specifications for Courses / Modules

Annex 1: specifications for courses/units

First Part

Course 1 Surgical pathology and Microbiology

Course 1 (Module) 1 (Surgical Pathology)

1. UNIT data

- + Unit Title: Surgical Pathology
- + code: SUR211A #
- + Speciality is *General Surgery*
- + Number of CPs : Didactic 2, (100%) practical 0 (%) total 2CP.
- + Department (s) delivering the course: Pathology in conjunction with *General Surgery*
- + Coordinator (s): Staff members of Pathology Department in conjunction with *General Surgery* Department as annually approved by both departments' councils
- + Date last reviewed: 9/ 2022
- + Requirements (prerequisites) if any :
 - + None

2. Unit aims

-The student should acquire the pathological facts necessary for ***clinical management of conditions related to General Surgery.***

3. Intended learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Mention Principles of General Pathology of: <ul style="list-style-type: none"> - Cell Injury, Cell Death - Acute and Chronic Inflammation. - Tissue Repair: Regeneration, Healing, and Fibrosis - Immunity & hypersensitivity. - Bacterial infection. - Disturbance of growth - Pathology of tumors 	-Lectures	-Written and oral examination - Log book
B. Pathologic Details of: <ul style="list-style-type: none"> – GIT Pathology. – The Liver, Gallbladder, and Billiary Tract – The Blood Vessels – The Oral Cavity. – Breast endocrinal pathology 		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of Pathology with clinical reasoning, diagnosis and management of common diseases related to General Surgery	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book

C-Practical skills =0

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A-Use information technology to manage information, access on-line medical information; and support their own education	-Observation and supervision -Written and oral communication	Oral Exam Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A,A.B	-Observation and supervision -Written and oral communication	Oral Exam Logbook Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	Senior Staff Experience	Oral Exam Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	360o global rating

4. Unit contents (topic s/modules/rotation Unit Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
- Principles of General Pathology	A	-	-	-
- Cell Injury, Cell Death	A	A	-	A-D
- Acute and Chronic Inflammation.	A	A	-	A-D
- Tissue Repair, Regeneration, Healing, and Fibrosis	A	A	-	A-D
- Immunity & hypersensitivity.	A	A	-	A-D
- Bacterial infection.	A			
- Disturbance of growth	A	A	-	A-E
- Pathology of tumors	A	A	-	A-E
Pathologic Details of:		A	-	A-E
- GIT Pathology.	B	A	-	A-E
- The Liver, Gallbladder, and Biliary Tract	B	A	-	A-E
- The Blood Vessels	B	A	-	A-D
- The Oral Cavity.	B	A	-	A-D
.-Breast endocrinal pathology	B	A	-	A-D

5. Methods of teaching/learning:

- Didactic (lectures, seminars, tutorial)
- Laboratory work
- Observation and supervision
- Written & oral communication
- Senior staff experience

6. Course Methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra Laboratory work according to their needs

7. Course assessment methods:

i. Assessment tools:

- Written and oral examination
- Log book

ii. Time schedule: At the end of the first part

iii. Marks: 100

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- KUMAR, V., COTRAN, R.S., and ROBBINS, S.L. Robbins Basic Pathology. 7th ed. 2002.

iii. Recommended books

- Rosai and Ackerman's Surgical Pathology Juan Rosai, Mosby 2004
- Sternberg's Diagnostic surgical Pathology 4th edition, 2004

iv. Periodicals, Web sites, ... etc










- Human pathology

iv. Periodicals, Web sites, ... etc

v. others: None.

Course 1: Unit (Module) 2; (Microbiology)

1. Unit data

-  **Unit Title: Microbiology**
-  **Unit code: SUR211A#**
-  **Speciality: General Surgery.**
-  **Number of CPs : Didactic 2, (100%) practical 0 (%) total 2CP.**
-  **Department (s) delivering the Unit: Microbiology in conjunction with General Surgery.**
-  **Coordinator (s):**
Staff members of Microbiology Department in conjunction with General Surgery Department as annually approved by both departments' councils
-  **Date last reviewed: 9/ 2022.**
-  **General requirements (prerequisites) if any :**
None
-  **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

2. Unit Aims

-The student should acquire the facts of microbiology necessary for General Surgery in practice

3. Intended learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe Principles of Microbiology of:</p> <ul style="list-style-type: none"> ✚ General bacteriology <ul style="list-style-type: none"> - Antimicrobial agents - Pathogenicity of microorganism - Diagnostic microbiology ✚ Microorganism encountered in soft tissue infection and surgical infection Staph, strept, pseudomonas and E-coli ✚ Immunology <ul style="list-style-type: none"> - Basic immunology - Immunologic diagnostic test and serology - Tumor immunology - Immunogenetics and transplantation immunology ✚ Sterilization 	<ul style="list-style-type: none"> -Lectures -Laboratory work 	<ul style="list-style-type: none"> -Written and oral examination -Assessment of practical skills - Log book

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Correlates the facts of microbiology with clinical reasoning, diagnosis and management of common diseases related to General Surgery</p>	<p>Didactic (lectures, seminars, tutorial)</p>	<ul style="list-style-type: none"> -Written and oral examination -Log book

C-Practical skills =0

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A-Use information technology to manage information, access on-line medical information; and support their own education	-Observation and supervision -Written and oral communication	Oral Exam Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A	-Observation and supervision -Written and oral communication	Oral Exam Logbook Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	Senior Staff Experience	Oral Exam Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	360o global rating

4. contents (topic s/modules/rotation UNIT Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
<ul style="list-style-type: none"> + General bacteriology 				
<ul style="list-style-type: none"> - Bacterial structure, growth and metabolism 	A	A	-	A-D
<ul style="list-style-type: none"> - Bacterial genetics 	A	A	-	A-D
<ul style="list-style-type: none"> - Antimicrobial agents 	A	A	-	A-D
<ul style="list-style-type: none"> - Pathogenicity of microorganism 	A	A	-	A-D
<ul style="list-style-type: none"> - Diagnostic microbiology 			A-C	
<ul style="list-style-type: none"> + Microorganism encountered in soft tissue infection and surgical infection Staph, strept, pseudomonas and E-coli 	A	A	-	A-D
<ul style="list-style-type: none"> + Immunology 	A	A	-	A-D
<ul style="list-style-type: none"> - Basic immunology Immunologic diagnostic test and serology 	A	A	-	A-D
<ul style="list-style-type: none"> - Tumor immunology 	A	A	-	A-D
<ul style="list-style-type: none"> - Immunogenetics and transplantation immunology 	A	A	-	A-D
<ul style="list-style-type: none"> - Sterilization 	A	A	-	A-D

5. Methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Laboratory work
3. Observation and supervision
4. Written & oral communication
5. Senior staff experience

6. Methods of teaching/learning: for students with poor achievements

- Extra Didactic (lectures, seminars, tutorial) according to their needs
- Extra Laboratory work according to their needs

7. assessment methods:

i. Assessment tools:

- 1- Written and oral examination
- 2- Log book

ii. Time schedule: At the end of the first part

iii. Marks: 100

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Jawetz, Melnick, & Adelberg's Medical Microbiology, 28th Edition, 2019

iii. Recommended books

- Sherris Medical Microbiology, 8th Edition, 2021
- Microbiology, 2nd edition: Books: by Richard A. Harvey, Pamela
- Appleton and Lange Review of Microbiology

iv. Periodicals, Web sites, ... etc

- Journal of clinical microbiology
- Microbiology
- Journal of Medical microbiology

v. others None

9. Signatures

Course Coordinator	
Unit 1 Coordinator:	Head of the Department:
Date:	Date:
Unit 2 Coordinator:	Head of the Department:
Date:	Date:

Course 2 (Surgical Anatomy and Pharmacology)

Name of department: General Surgery










Faculty of medicine

Assiut University

2022-2023

Course 2 Unit (Module) 1 (Anatomy)

1. Unit data

-  **Unit Title: Surgical Anatomy**
-  **Unit code: SUR211A#**
-  **Speciality: General Surgery**
-  **Number of CPs : Didactic 2, (100%) practical 0 (%) total 2CP.**
-  **Department (s) delivering the Unit: Anatomy in conjunction with General Surgery.**
-  **Coordinator (s):**
Staff members of Anatomy Department in conjunction with General Surgery Department as annually approved by both departments' councils
-  **Date last reviewed: 9/ 2022.**
-  **General requirements (prerequisites) if any :**
None
-  **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

2. Unit Aims

The student should acquire the facts of Surgical Anatomy & embryology which is necessary for reasoning and management conditions related to General Surgery.

3. Intended learning outcomes (ILOs)

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe Principles of:</p> <ul style="list-style-type: none"> ✚ Anatomy of the following : - Head and neck - Thyroid. - The surface anatomy of the neck, - The facial compartments of the neck, - The thyroid gland, - The parathyroid glands, - The palate, - The tongue and floor of the mouth, - The tongue, - The floor of the mouth - The salivary glands, - The parotid gland, - The submandibular gland, - The sublingual gland, - The major arteries of the head and neck, - The common carotid arteries, - The external carotid artery, - The internal carotid artery, - The subclavian arteries, - The veins of the head and neck, 	<p>-Lectures</p>	<p>-Written and oral examination -Assessment of practical skills - Log book</p>

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> - The internal jugular vein, - The subclavian vein, - The lymph nodes of the neck, - The cervical sympathetic trunk, - The branchial system and its derivatives, - Branchial cyst and fistula, - The surface anatomy and surface markings of the head, - The scalp - The mandible and - The temporomandibular joint. ✚ The Abdomen and Pelvis - Surface anatomy and surface markings, - Vertebral levels, - Surface markings, - The fasciae and muscles of the abdominal wall, - Fasciae of the abdominal wall, - The muscles of the anterior abdominal wall, - The anatomy of abdominal incisions, - The inguinal canal, - Peritoneal cavity, - Intraperitoneal fossae, - The subphrenic spaces, - The gastrointestinal tract, - The Oesophagus, - The stomach, The duodenum, - Small intestine, - Large intestine, - The appendix, - The rectum, - Arterial supply of the intestine, - The portal system of veins, - Lymph drainage of the intestine, - The structure of the alimentary canal, - The development of the intestine and its | | |
|--|--|--|

<p>congenital abnormalities,</p> <ul style="list-style-type: none"> - The gastrointestinal adnexae: liver, gall-bladder and its ducts, pancreas and spleen, - The liver, - The biliary system, - The gall-bladder, - The pancreas, - The spleen <p>*The Thorax</p> <ul style="list-style-type: none"> – Surface markings of the more important thoracic contents, – The thoracic cage, – The lungs, – The mediastinum, – The thoracic duct, 		
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B- Intellectual outcomes

ILO	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of anatomy and embryology with clinical reasoning, diagnosis and management of common diseases related to General Surgery.	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book

C-Practical Skills =0

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A-Use information technology to manage information, access on-line medical information; and support their own education	-Observation and supervision -Written and oral communication	Oral Exam Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A	-Observation and supervision -Written and oral communication	Oral Exam Logbook Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	Senior Staff Experience	Oral Exam Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	360o global rating

**4. Unit contents (topic s/modules/rotation
Unit Matrix**

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
Head neck anatomy				
The surface anatomy of the neck,	A	A	-	A,B
The thyroid gland,	A	A	-	A,B
The parathyroid glands,				
The palate,	A	A	-	A,B
The tongue and floor of the mouth,	A	A	-	A,B
The tongue,	A	A	-	A,B
The floor of the mouth	A	A	-	A,B
The salivary glands,	A	A	-	A,B
The parotid gland,	A	A	-	A,B
The submandibular gland,	A	A	-	A,B
The sublingual gland,	A	A	-	A,B
The major arteries of the head and neck,	A	A	-	A,B
The common carotid arteries,	A	A	-	A,B
The external carotid artery,	A	A	-	A,B
The internal carotid artery,	A	A	-	A,B
The subclavian arteries,	A	A	-	A,B
The veins of the head and neck,	A	A	-	A,B
The internal jugular vein,	A	A	-	A,B
The subclavian vein,	A	A	-	A,B
The lymph nodes of the neck,	A	A	-	A,B
The cervical sympathetic	A	A	-	A,B

trunk,				
The branchial system and its derivatives,	A	A	-	A,B
Branchial cyst and fistula,	A	A	-	A,B
The surface anatomy and surface markings of the head,	A	A	-	A,B
The scalp	A	A	-	A,B
The mandible and	A	A	-	A,B
The temporomandibular joint.	A	A	-	A,B
The Abdomen and Pelvis	A	A	-	A,B
Surface anatomy and surface markings,	A	A	-	A,B
Vertebral levels,	A	A	-	A,B
Surface markings,	A	A	-	A,B
The fasciae and muscles of the abdominal wall,	A	A	-	A,B
Fasciae of the abdominal wall,	A	A	-	A,B
The muscles of the anterior abdominal wall,	A	A	-	A,B
The anatomy of abdominal incisions,	A	A	-	A,B
The inguinal canal,	A	A	-	A,B
Peritoneal cavity,	A	A	-	A,B
Intraperitoneal fossae,	A	A	-	A,B
The subphrenic spaces,	A	A	-	A,B
The gastrointestinal tract,	A	A	-	A,B
The Oesophagus,	A	A	-	A,B
The stomach, The duodenum,	A	A	-	A,B
Small intestine,	A	A	-	A,B
Large intestine,	A	A	-	A,B
The appendix,	A	A	-	A,B

The rectum,	A	A	-	A,B
Arterial supply of the intestine,	A	A	-	A,B
The portal system of veins,	A	A	-	A,B
Lymph drainage of the intestine,	A	A	-	A,B
The structure of the alimentary canal,	A	A	-	A,B
The development of the intestine and its congenital abnormalities,	A	A	-	A,B
The gastrointestinal adnexae: liver, gall-bladder and its ducts, pancreas and spleen,	A	A	-	A,B
The liver,	A	A	-	A,B
The biliary system,	A	A	-	A,B
The gall-bladder,	A	A	-	A,B
The pancreas,	A	A	-	A,B
The spleen	A	A	-	A,B
The Thorax	A	A	-	A,B
Surface markings of the more important thoracic contents,	A	A	-	A,B
The thoracic cage,	A	A	-	A,B
The lungs,	A	A	-	A,B
The mediastinum,	A	A	-	A,B
The thoracic duct,	A	A	-	A,B

5. Methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Laboratory work
3. Observation and supervision
4. Written & oral communication
5. Senior staff experience

6. Methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra Laboratory work according to their needs

7. Assessment methods:

i. Assessment tools:

- 1- Written and oral examination
- 2- Log book

ii. Time schedule: At the end of the first part

iii. Marks: 100 marks

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Cunningham' textbook anatomy.
- Last Anatomy.

iii. Recommended books

- Skandalakis Surgical Anatomy: The Embryologic and Anatomic Basis of Modern Surgery, 2004
 - Grey's Anatomy.

iv. Periodicals, Web sites, ... etc

- American Journal of General Surgery
- GIT
- Abdomen
- BJS
- European Journal of General surgery
- Egyptian Journal of General Surgery

v. others : None.

Course 2 unit 2 (Pharmacology)

1. Unit data

- ✚ Unit Title: Pharmacology
- ✚ code: SUR211B#
- ✚ Speciality is *General Surgery*
- ✚ Number of CPs : Didactic 2, (100%) practical 0 (%) total 2CP.
- ✚ Department (s) delivering the course: Pharmacology in conjunction with *General Surgery*.
- ✚ Coordinator (s): Staff members of Pathology Department in conjunction with *General Surgery* Department as annually approved by both departments' councils
- ✚ Date last reviewed: 9/ 2022
- ✚ Requirements (prerequisites) if any :
 - ✚ None

2. Course aims

-The student should acquire the pharmacological facts necessary for ***clinical management of conditions related to General Surgery.***

3. Intended learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
A.Outline Principles of General pharmacology including; Pharmacokinetics. Pharmaco-dynamics	-Lectures	-Written and oral examination - Log book
B-Describe Pharmacological Details of: <ul style="list-style-type: none"> - Pain control Drugs - Chemotherapy - Antibiotics - Cancer chemotherapy - Anticoagulants - Corticosteroids - Hormonal Therapy 		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of Pharmacology with clinical reasoning, diagnosis and management of common diseases related to General Surgery.	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book

C- Practical skills = 0

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A-Use information technology to manage information, access on-line medical information; and support their own education	-Observation and supervision -Written and oral communication	Oral Exam Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A,A.B	-Observation and supervision -Written and oral communication	Oral Exam Logbook Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	Senior Staff Experience	Oral Exam Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	360o global rating

4. Unit contents (topic s/modules/rotation Unit Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
- Pain control Drugs	B	A	-	A-D
- Chemotherapy	B	A	-	A-D
- Antibiotics	B	A	-	A-D
- Cancer chemotherapy	B	A	-	A-D
- Anticoagulants	B	A	-	A-B
- Corticosteroids	B	A	-	A-D
- Hormonal Therapy	B	A	-	A-D

5. Methods of teaching/learning:

- 1 Didactic (lectures, seminars, tutorial)
- 2 Observation and supervision
- 3 Written & oral communication
- 4 Senior staff experience

6. Methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra Laboratory work according to their needs

7. assessment methods:

i. Assessment tools:

1. Written and oral examination
2. Log book

ii. Time schedule: At the end of the first part

iii. Marks: 100

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Katzung and Trevor's Pharmacology (Examination & Board Review Series (Appleton & Lange)) 7th Edition. 2004

iii. Recommended books

Clinical Phamacology

iv. Periodicals, Web sites, ... etc

- Human Pharmacology.

iv. Periodicals, Web sites, ... etc

- American Journal of General Surgery
- GIT
- Abdomen
- BJS
- European Journal of General surgery
- Egyptian Journal of General Surgery

v. others None

9. Signatures

Course Coordinator	
Unit 1 Coordinator:	Head of the Department:
Date:	Date:
Unit 2 Coordinator:	Head of the Department:
Date:	Date:

Course 3 General Surgery 1

Name of department: General Surgery

Faculty of medicine

Assiut University

2022-2023

1. Course data

Course Title: General Surgery 1.

Course code: SUR211C

Speciality: General Surgery.

**Number of CP: Didactic 6 (37.5%) practical 10 (62.5%) total
16 CP**

**Department (s) delivering the course: Department Of
General Surgery - Faculty of Medicine- Assiut University.**

Coordinator (s):

-Course coordinator: Pr. Dr. Mostafa Thabet

**-Assistant coordinator (s) Professor Dr. Hesham Reyaad,
Ashraf Helmy., Mohammad Baker**

Date last reviewed: 9/ 2022

General requirements (prerequisites) if any :

None

**Requirements from the students to achieve course ILOs are
clarified in the joining log book.**

2. Course aims

1. To enable candidates to acquire satisfactory level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in the area of General Surgery 1 and enabling the candidates of making appropriate referrals to a sub-specialist.

3. Course intended learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ol style="list-style-type: none"> 1. Types of wounds 2. Factor affecting wound healing 3. Management of multiple injury patients 4. causes of mortality due to trauma 5. Fluid and electrolyte imbalance 6. Acid base disequilibrium 7. Planning of fluid and electrolyte therapy 8. Classification of hemorrhage 9. Management of blood transfusion 10. Complication of blood transfusion 11. Defects of haemostasis 12. Abnormal bleeding during surgery or in postoperative period 13. Types of shock 14. Management of shock 15. Complication of surgical infections 16. Management of surgical infections 17. Burns and reconstructive surgery 18. Causes, diagnosis of malnutrition in the surgical patients 19. Nutritional support to surgical patients 20. Etiology, diagnosis and treatment of tumors 	<p>Didactic;</p> <ul style="list-style-type: none"> -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching) 	<ul style="list-style-type: none"> -OSCE at the end of each year -log book & portfolio - MCQ examination at the second year -Oral and written exam

21. Indication, technical consideration, complications and results of renal, hepatic pancreatic cardiac and bone marrow transplantation 22. Terminal care in surgical patient		
B- Outline the updated principles of <ul style="list-style-type: none"> • Antibiotics • Antiseptics • Antiparasitic • Chemotherapy • TB chemotherapy • Cancer chemotherapy • Corticosteroids • Antiviral 		
C. Memorize the basic and clinically supportive sciences which are appropriate to the conditions mentioned above.		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to General Surgery 1 .	Clinical rounds Senior staff experience	Procedure/case presentation Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to General Surgery 1 .		
C. Design and present cases , seminars in common problem		
D-Formulate management plans and alternative decisions in different situations in the field of the General Surgery .		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Obtain proper history and examine patients in caring and respectful behaviors.</p>	<p>-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)</p>	<p>OSCE at the end of each year -log book & portfolio - One MCQ examination</p>
<p>B. Order the following non invasive & invasive diagnostic procedures</p> <ul style="list-style-type: none"> •CT brain. •Abdominal sonar. •Plain X-ray limbs. •CT abdomen. •Arterial blood gases. •Blood picture. •Haematocrite value. •Peritoneal lavage and aspiration. •Serum electrolyte. •Blood PH and gas measurement. •Platelet count. •Bone marrow aspiration and biopsy. •Bleeding time. •Tests for platelets function (adhesion, release and aggregation) . •Prothrombin time. •Partial thromboplastine time. •Thrombin time. •CVP. •PA WP. 	<p>Clinical round with senior staff Observation Post graduate teaching Hand on workshops</p>	<p>-Procedure presentation - Log book - Chick list</p>

<ul style="list-style-type: none"> •ECG. •Temperature. •Bacteriological studies of wound discharge. •Culture and sensitivity. •Tuberculin skin test. •ESR. •Biopsy. •Serum albumen. 		
<p>C. Perform the following non invasive &invasive therapeutic procedures : prescribe proper treatment for conditions in AA.</p>	Clinical round with senior staff	Procedure presentation - Log book - Chick list
<p>D. Carry out patient management plans for some problems mentioned above</p>	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
<p>E. Counsel and educate patients and their family about *Problems mentioned above.</p>	Clinical round with senior staff	-Procedure presentation - Log book - Chick list
<p>F. Provide health care services aimed at preventing the conditions: *Problems mentioned above.</p>	Clinical round with senior staff	
<p>G. Use information technology to support patient care decisions and patient education for the above mentioned conditions above.</p>		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology in one of this course surgical problems.	-Case log -Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and Portfolios
B. Appraises evidence from scientific studies(journal club)	-Journal clubs - Discussions in seminars and clinical rounds	
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	Clinical rounds Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure/case presentation Log book Portfolios Chick list and
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in common problems related to General Surgery.	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients Surgical report -Abdominal ultrasonography report -Death report	Senior staff experience	Chick list
L. Council patients and families about:	Clinical round with senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	Observation Senior staff experience Case taking	1. Objective structured clinical examination 2. Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		1. 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		1. Objective structured clinical examination 2. global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	Observation Senior staff experience	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		1. Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		1. 360o global rating 2. Patient survey

4. Course Matrix

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
Unit 1 Principle in general surgery 1				
Types of wounds	A,C	A-D	A-G	A-R
Factor affecting wound healing	A,C	A-D	A-G	A-R
Management of multiple injury patients	A,C	A-D	A-G	A-R
causes of mortality due to trauma	A,C	A-D	A-G	A-R
Fluid and electrolyte imbalance	A,C	A-D	A-G	A-R
Acid base disequilibrium	A,C	A-D	A-G	A-R
Planning of fluid and electrolyte therapy	A,C	A-D	A-G	A-R
Classification of hemorrhage	A,C	A-D	A-G	A-R
Management of blood transfusion	A,C	A-D	A-G	A-R
Complication of blood transfusion	A,C	A-D	A-G	A-R
Defects of haemostasis	A,C	A-D	A-G	A-R
Abnormal bleeding during surgery or in postoperative period	A,C	A-D	A-G	A-R
Types of shock	A,C	A-D	A-G	A-R
Management of shock	A,C	A-D	A-G	A-R
Complication of surgical infections	A,C	A-D	A-G	A-R
Management of surgical infections	A,C	A-D	A-G	A-R
Burns and reconstructive surgery	A,C	A-D	A-G	A-R
Causes, diagnosis of malnutrition in the surgical patients	A,C	A-D	A-G	A-R

Nutritional support to surgical patients	A,C	A-D	A-G	A-R
Etiology, diagnosis and treatment of tumors	A,C	A-D	A-G	A-R
Indication, technical consideration,	A,C	A-D	A-G	A-R
complications and results of renal, hepatic pancreatic cardiac and bone marrow transplantation	A,C	A-D	A-G	A-R
Terminal care in surgical patient.	A,C	A-D	A-G	A-R

5. Course Methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Outpatient
3. Inpatient
4. Case presentation
5. Direct observation
6. journal club
7. Critically appraised topic.
8. Educational prescription
9. Clinical rounds
10. Clinical rotation
11. Senior staff experience
12. Case log
13. Observation and supervision
14. Written & oral communications
15. Simulation
16. Hand on work shop
17. Service teaching
18. Perform under supervision of senior staff
19. Postgraduate teaching

6. Course Methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

1. Oral examination
2. Clinical examination
3. Written examination
4. Objective structure clinical examination (OSCE)
5. Procedure/case Log book and Portfolios
6. Simulation
7. Record review (report)
8. Patient survey
9. 360o global rating
10. Check list evaluation of live or recorded performance
11. MCQ Exam

ii. Time schedule: At the end of first part

iii. Marks: 300

8. List of references

i. Lectures notes

Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Bailey & Love's Short Practice of Surgery, 27th Edition, 2018
- Current Diagnosis and Treatment Surgery, 15th Edition 2020
- Skandalakis' McGraw-Hill's: Textbook of Surgical Anatomy , 11th ed. Saunders, 2006.

- Gray's Anatomy , the 42nd (October 2020),
- KUMAR, V., COTRAN, R.S., and ROBBINS, S.L. Robbins Basic Pathology. 7th ed. 2002.

iii. Recommended books

- Maingot's Abdominal Operations. 13th edition 13th Edition, 2018

iv. Periodicals, Web sites, ... etc

- American Journal of General Surgery
- GIT
- Abdomen
- BJS
- European Journal of General surgery
- Egyptian Journal of General Surgery
 - Journal of Hepatology
 - v. Others

None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Second Part

Course 4 General Surgery 2

Name of department: General Surgery

Faculty of medicine

Assiut University

2022-2023

1. Course data

+ Course Title: **General Surgery 2.**

+ Course code: **SUR211D**

+ Speciality: **General Surgery.**

Number of Credit points Didactic 24(17.9 %) practical
110 (82.1 %) total 134 CPS

+ **Department (s) delivering the course:** Department Of
General Surgery - Faculty of Medicine- Assiut University.

+ **Coordinator (s):**

Principle coordinator: Dr. Mohamed Safwat shaheen
Assistant coordinator (s)

Dr. Nagm Eldin Abou Elnaga Ahmed

+ **Date last reviewed:** 9/ 2022

+ **General requirements (prerequisites) if any :**None

+ **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

This course consists of 7 Units (Modules)

1. Unit (Module) GIT Surgery
2. Unit (Module) Breast and Endocrine Surgery
3. Unit (Module) Maxillofacial and neck Surgery
4. Unit (Module) Abdominal wall ,Hernias , Testis and Scrotal Surgery
5. Unit (Module) cardiothoracic Surgery
6. Unit (Module) Vascular Surgery
7. Unit (Module) Plastic Surgery

2. Course aims

1. To enable candidates to acquire satisfactory level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in the area of General Surgery 2 and enabling the candidates of making appropriate referrals to a sub-specialist.
2. Provide candidates with fundamental knowledge and skills of dealing with critically ill patients, with General Surgery diseases.
- 3-To demonstrate the ability to provide patient-centered care that is appropriate, compassionate, and effective for treatment of General Surgical health problems and the promotion of health.
- 4-To give opportunities to evaluate and manage a broad variety of General Surgery diseases.
- 5-To learn candidates to develop skills for using diagnostic tools (as paracentesis , abdominal US, Breast biopsy, etc---).

COURSE 4 Unit 1 GIT Surgery

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <p>Section 1: Esophagus:</p> <ol style="list-style-type: none"> 1. Congenital anomalies of the esophagus 2. Congenital diaphragmatic hernia 3. Esophageal injuries 4. Neuromuscular abnormalities 5. Esophageal hiatus hernia 6. Esophageal carcinoma 7. Dysphagia <p>Section 2: stomach and duodenum</p> <ol style="list-style-type: none"> 1. Congenital hypertrophic pyloric stenosis 2. Acute gastric dilatation 3. Peptic ulcer 4. Complication f gastric operations 5. Neoplasms of the stomach 6. Gastrectomy <p>Section 3 : liver</p> <ol style="list-style-type: none"> 1. Liver trauma 2. Infection of the liver 3. Portal hypertension 4. Liver tumors <p>Section 4 : Biliary System:</p> <ol style="list-style-type: none"> 1. Congenital anomalies of gall bladder and bile duct 2. Gall stones 3. Stricture of the biliary tract 4. Carcinoma of the gall bladder 	<p>Didactic;</p> <ul style="list-style-type: none"> -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching) 	<ul style="list-style-type: none"> -OSCE at the end of each year -log book & portfolio - MCQ examination -Oral and written exam

5. Jaundice

Section 5 : Pan crease

1. Congenital anomalies of the pancreas
2. Pancreatic neoplasm

Section 6 : Spleen:

1. Congenital anomalies
2. Rupture of spleen
3. Infections of spleen
4. Cyst of spleen
5. Tumors the spleen
6. Splenomegaly
7. Hemolytic anemia
8. Hypersplenism
9. splenectomy

Section 7 : Peritoneum mesentery and omentum :

1. Peritonitis
2. Interapertoneal abscess
3. Peritoneal tumors
4. Ascites
5. Torsion of omentum
6. Mesenteric cyst
7. Mesenteric lymphadenitis
8. Retropertoneal tumors

Section 8 : small and large intestine :

1. Principles of Colonic Surgery
2. Intestinal stoma
3. Congenital anomalies
4. Intestinal trauma
5. Intestinal fistula
6. Intestinal diverticulae
7. Inflammatory bowel disease
8. Intestinal ischemia
9. Intestinal tumors
10. Intestinal obstruction
11. Rectal prolapse

<p>Section 9 : Vermiform Appendix</p> <ol style="list-style-type: none"> 1. Appendicitis 2. Neoplasm of the appendix <p>Section 10 : Anal Canal</p> <ol style="list-style-type: none"> 1. Pilonidal sinus 2. Anal fissure 3. Hemorrhoids 4. Anorectal abscess 5. anal fistula 6. fecal incontinence 7. anal canal and anal verge tumors 		
<p>B. Outline the principles of :</p> <p><u>Common conditions related to</u></p> <ul style="list-style-type: none"> - Gastrointestinal bleeding -Vomiting -Dysphagia -Abdominal pain -Constipation <p><u>Less common</u></p> <ul style="list-style-type: none"> -Caustic injury - foreign body -Motility disorder -parasitic infestation as hydatid disease of the liver, amoebic liver abscess -Intestinal ischemia -Vascular malformation of the GIT -Gastrointestinal polyposis -Drug induced damage of the Gastrointestinal tract -Perforated peptic ulcers -Management of GIT bleeding -Endoscopy in Gastrointestinal tract. -Radiology in Gastrointestinal tract. 		
<p>C. State update and evidence based Knowledge of</p> <ul style="list-style-type: none"> -Guidelines in management of Acute Abdomen. -Guidelines in management of Gastrointestinal Bleeding. 		

- Guidelines in management of intestinal obstruction - Guidelines in management of Peptic ulcer. -Guidelines in management of inflammatory bowel diseases(Crohn’s disease and Ulcerative colitis) -Management of acute and chronic pancreatitis		
D. Memorize the facts and principles of the relevant basic and clinically supportive sciences related to GIT Surgery.		
E. Mention the basic ethical and medicolegal principles relevant to GIT Surgery.		
F. Mention the basics of quality assurance to ensure good clinical care in GIT Surgery..		
G. Mention the ethical and scientific principles of medical research.		
H. State the impact of common health problems in the field of GIT Surgery on the society.		

B-Intellectual outcomes for all units (unit 17)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to General Surgery 2.	Clinical rounds Senior staff experience	Procedure/case presentation Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to General Surgery 2.		
C. Design and present cases , seminars in common problem		
D-Formulate management plans and alternative decisions in different situations in the field of the General Surgery 2.		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Obtain proper history and examine patients in caring and respectful behaviors.</p>	<ul style="list-style-type: none"> -Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching) 	<p>OSCE at the end of each year</p> <ul style="list-style-type: none"> -log book & portfolio - One MCQ examination at the second half of the second year and another one in the third year
<p>B. Order the following non invasive &invasive diagnostic procedures</p> <ul style="list-style-type: none"> -Routine appropriate Lab investigations related to conditions mentioned above - Barium swallow - Barim meal - Plain X-ray to abdomen showing the diaphragmatic copulae - Liver function - Abdominal sonar - Cholangiography - HIDA Scan - Serum Amylase - Bone marrow examination - Blood picture - Barium enema 	<p>Clinical round with senior staff</p> <p>Observation</p> <p>Post graduate teaching</p> <p>Hand on workshops</p>	<ul style="list-style-type: none"> -Procedure presentation - Log book - Chick list

<ul style="list-style-type: none"> - Mesenteric angiography - CT abdomen - Upper and lower endoscopy. - Diagnostic Laparoscopy. 		
<p>C. Interpret the following non invasive &invasive diagnostic procedures</p> <p>-Routine appropriate Lab investigations related to conditions mentioned in A.A</p> <hr/> <ul style="list-style-type: none"> - X ray abdomen. - Abdominal Ultrasonography. - Diagnostic Laparoscopy. - Upper Endoscopy - Lower Endoscopy - ERCP 	Clinical round with senior staff	Procedure presentation - Log book - Chick list
<p>D. Perform the following non invasive/invasive Diagnostic and therapeutic procedures.</p> <ul style="list-style-type: none"> - Blood sugar testing. - Ryle's tube insertion -Application of urinary catheter. -Application of Intravenous cannula. - Appendicectomy - Haemorrhoidectomy - Fissurectomy and internal sphincterotomy - Fistulectomy and fistulotomy 	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
<p>E. Carry out patient management plans for the following problems List...</p> <p>Trachestomy Gastrostomy Jejunostomy Iliostomy Colostomy Other conditions related to GIT Surgery</p>	Clinical round with senior staff	- Procedure presentation - Log book - Chick list
	Clinical round with senior staff	
<p>F. Use information technology to support patient care decisions and patient education in common clinical situations related to GIT Surgery.</p>		

G- Provide health care services aimed at preventing infection eg. Hepatitis AIDS Wound infection		
H- Work with health care professionals, including those from other disciplines, to provide patient-focused care for the following: Colostomy care Tacheostomy tube care Disinfection Caring wounds		
I. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records)		

**D-General Skills for the speciality course in
General surgery 2 (units 1-7)**

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology in one of this course surgical problems.	-Case log -Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and Portfolios
B. Appraises evidence from scientific studies(journal club)	-Journal clubs - Discussions in seminars and clinical rounds	

C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	Clinical rounds Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure/case presentation Log book Portfolios Chick list and
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in common problems related to General Surgery 2 .	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients Surgical report -Abdominal ultrasonography report -Death report	Senior staff experience	Chick list

<p>L. Council patients and families about:</p> <ul style="list-style-type: none"> - Screening Breast cancer. -Screening of hepatic tumors -Inflammatory bowel diseases. -Irritable bowel syndrome. -Screening of colorectal cancer. -Risk factors and complications of peptic ulcer. -Gastrointestinal polyposis. -Congenital anomalies. - Congenital Heart diseases - Varicocele -undescended testis - Burns 	<p>Clinical round with senior staff</p>	
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Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society</p>	<p>Observation Senior staff experience Case taking</p>	<p>1. Objective structured clinical examination 2. Patient survey</p>
<p>N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices</p>		<p>1. 360o global rating</p>
<p>O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities</p>		<p>1. Objective structured clinical examination 2. global rating</p>

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	Observation Senior staff experience	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		1. Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		1. 360o global rating 2. Patient survey

Unit (Module) 2 *Breast and Endocrine Surgery*

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> -Goiter - Hyperparathyroidism - Hypoparathyroidism . Adrenal tumors - Congenital anomalies of the breast - Inflammation of the breast - Fibrocystic diseases of the breast - Cyst of the breast - Nipple discharge - Breast neoplasm 	<p>Didactic;</p> <ul style="list-style-type: none"> -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching) 	<ul style="list-style-type: none"> -OSCE at the end of each year -log book & portfolio - MCQ examination at the second year -Oral and written exam

- Diseases of male Breast.		
B. Illustrate the Physiologic Principles of the following Thyroid gland Parathyroid gland Adrenal gland Breast		
C. State update and evidence based Knowledge of -Topics mentioned in AA		
D. Memorize the facts and principles of the relevant basic and clinically supportive sciences related to Surgery.		
E. Mention the basic ethical and medicolegal principles relevant to Surgery.		

B-Intellectual outcomes
See Intellectual outcomes in unit 1
C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	OSCE at the end of each year -log book & portfolio - One MCQ examination at the second half of the second year and another

		one in the third year
<p>B. Order the following non invasive& invasive diagnostic procedures</p> <ul style="list-style-type: none"> - Vocal cord examination - Thyroid function test - Fine needle Aspiration - Tru – cut biopsy - Thyroid scan - Parathormone assay - Serum calcium level - Ultra sonography - CT scan - Plasma catecholamine - Plasma cortisol, ACTH 	<p>Clinical round with senior staff Observation Post graduate teaching Hand on workshops</p>	<p>-Procedure presentation - Log book - Chick list</p>
<p>C. Interpret the following non invasive& invasive diagnostic procedures</p> <p>-Routine appropriate Lab investigations related to conditions mentioned in A.A</p> <ul style="list-style-type: none"> - -Vocal cord examination - Thyroid function test - Fine needle Aspiration - Tru – cut biopsy - Thyroid scan - Parathormone assay - Serum calcium level - Ultra sonography - CT scan - Plasma catecholamine - Plasma cortisol, ACTH 	<p>Clinical round with senior staff</p>	<p>-Procedure presentation - Log book - Chick list</p>
<p>D. carry out patient management plans for the following problems:</p> <p>Differential Diagnosis of Solitary Thyroid nodule Diagnosis of hyperparathyroidism Surgical hypertension Early detection of breast cancer</p>	<p>Clinical round with senior staff -Perform under supervision of senior staff</p>	<p>-Procedure presentation - Log book - Chick list</p>

E. Counsel and educate patients and their family about some disease which should be detected early like cretinism and cancer breast	Clinical round with senior staff	- Procedure presentation - Log book - Chick list
F. Work with health care professionals, including those from other disciplines, to provide patient-focused care	Clinical round with senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to General Surgery.		
H-Provide health care services aimed at preventing health problems related to conditions mentioned in AA		
I-Provide patient-focused care in common conditions related to Breast and Endocrine Surgery , while working with health care professionals, including those from other disciplines like: Conditions mentioned above.		

D-General Skills

See general skills in unit 1

Unit (Module) 3 Maxillofacial and Neck Surgery

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: Congenital anomalies of the face and tongue 2- Maxillofacial injuries 3- Infections of the face and tongue 4- Neoplasms of the tongue and jaws 5-Diseases of the salivary glands 6-Differential diagnosis of neck masses and their treatment</p>	<p>Didactic; Lectures Clinical rounds</p>	<p>-log book - one MCQ examination at the second year -Oral and written exam</p>
<p>B. Outline the principles of :- - Deglutition - salivary gland</p>		
<p>C. State update and evidence based Knowledge of Diseases of Maxillofacial an neck mentioned in A</p>		
<p>D. . Memorize the facts and principles of the relevant basic supportive sciences related to Maxillary and neck Surgery.</p>		
<p>E. Mention the basic ethical and medicolegal principles relevant to Maxillary and neck Surgery.</p>		
<p>F. Mention the basics of quality assurance to ensure good clinical care in Maxillary and neck Surgery</p>		
<p>G. Mention the ethical and scientific principles of medical research.</p>		
<p>H. State the impact of common health problems in the field of Maxillary and neck Surgery on the society.</p>		

B-Intellectual outcomes
See Intellectual outcomes in unit 1

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Obtain proper history and examine patients in caring and respectful behaviors.</p>	<ul style="list-style-type: none"> -Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching) 	<ul style="list-style-type: none"> -log book - One MCQ examination at the second half of the second year
<p>B. Order the following non invasive& invasive diagnostic procedures</p> <ul style="list-style-type: none"> -X-ray - CT scan head and neck - Sialography - True- Cut needle biopsy 	<ul style="list-style-type: none"> -Clinical round with senior staff Observation Post graduate teaching 	<ul style="list-style-type: none"> - Log book - Chick list
<p>C - interpret non invasive& invasive diagnostic procedures mentioned in C.B</p>		
<p>D. carry out patient management plans for the following problems:</p> <ul style="list-style-type: none"> - Surgical correction of cleft lip and palate -Fixation of bones in maxillofacial injuries - Surgical excision of tumor of tongue - Condylectomy - Parotidectomy 	<ul style="list-style-type: none"> Clinical round with senior staff 	<ul style="list-style-type: none"> -Procedure presentation - Log book - Chick list

-Submandibular sialadenectomy		
E Counsel and educate patients and their family about Care of the eye of Radical treatment of Parotid.	Clinical round with senior staff -Perform under supervision of senior staff	-Procedure presentation - Log book - Chick list
F. Provide health care services aimed at preventing the following conditions: Complication and disfigurement after surgery	Clinical round with senior staff	- Procedure presentation - Log book - Chick list
G-. Work with health care professionals, including those from other disciplines, to provide patient-focused care.	Clinical round with senior staff	
H . Use information technology to support patient care decisions and patient education		
I -Provide health care services aimed at preventing health problems related to maxillofacial surgery like: Maxillofacial injuries		
J-Provide patient-focused care in common conditions related to Maxillofacial, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.		

D-General Skills
See general skills in unit 1

Unit (Module) 4 Abdominal Wall, Hernias, Testis and Scrotal Surgery

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <p>Disease of abdominal wall</p> <ul style="list-style-type: none"> - Inguinal Hernia - Femoral Hernia - Umbilical Hernia - Epigastric Hernia - Other rare types of Hernias - Congenital anomalies of the testis - Inflammatory, conditions of testis and spermatic cord - Neoplasm of the testis - Varicocele - Hydrocele - Fournier's gangrene - Carcinoma of the Pines 	<p>Didactic; Lectures Clinical rounds</p>	<p>-log book - one MCQ examination at the second year -Oral and written exam</p>
<p>B- Illustrate the principles of surgical anatomy & pathology of the following Abdominal wall scrotum. Abdominal incisions.</p>		
<p>C. State update and evidence based Knowledge of Testis and scrotum disease</p>		
<p>D. Memorize the facts and principles of the relevant basic supportive sciences related to abdominal surgery &scrotum.</p>		

E. Mention the basic ethical and medicolegal principles relevant to Disease of abdominal wall& scrotum,		
F. demonstrate -Principles surgical pathology of -Diseases mentioned above		
G. Mention the basics of quality assurance to ensure good clinical care		
H. Mention the ethical and scientific principles of medical research.		
I. State the impact of common health problems in the field of abdominal surgery on the society.		

B-Intellectual outcomes

See Intellectual outcomes in unit 1

C-Practical skills (Patient Care

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-log book - One MCQ examination at the second half of the second year
B. Order the following non invasive& invasive diagnostic procedures	-Clinical round with senior	- Log book - Chick list

-Scrotal sonar -Doppler sonar - Diagnostic Laparoscopy	staff Observation Post graduate teaching	
C- Interpretate the following non invasive & invasive diagnostic procedures -Scrotal sonar -Doppler sonar - Diagnostic Laparoscopy	-Clinical round with senior staff Observation Post graduate teaching	- Log book - Chick list
D. Prescribe the following non invasive/invasive therapeutic procedures : e.g. Aspiration fro the Scrotum -- Reversibility test	Clinical round with senior staff	-Procedure presentation - Log book - Chick list
E-Perform the following non invasive/invasive therapeutic procedures : Aspiration from the Scrotum Reversibility test		
F. Carry out patient management plans for the following problems as mentioned above	Clinical round with senior staff -Perform under supervision of senior staff	-Procedure presentation - Log book - Chick list
G . Counsel and educate patients and their family about problems mentioned above.	Clinical round with senior staff	- Procedure presentation - Log book - Chick list
H. Provide health care services aimed at preventing the infectious diseases of the testis.	Clinical round with senior staff	
I. Work with health care professionals, including		

<p>those from other disciplines, to provide patient-focused care for the following:</p> <ul style="list-style-type: none"> -Cardiac diseases -Pre operative assessments -Rehabilitation 		
<p>J- Use information technology to support patient care decisions and patient education for the above mentioned</p>		
<p>K-Provide patient-focused care in common conditions related to Nutrition, while working with health care professionals, including those from other disciplines like: Conditions mentioned in above.</p>		

D- General Skills
See general skills in unit 1

Unit (Module) 5 Cardiothoracic surgery

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> -Chest injuries - chest wall and pleural infections - tumors of Ribs, lung and pleura - Post-operative Atelectasis - Lung Abscess - Bronchiectasis- Pulmonary TB - Actinomycosis- Cysts - Pulmonary embolism - Post operative Complications - Thymus Gland - Mediastinum - Cardiac injuries - Cardiac arrest - Pediatric - Congenital heart Disease - Acquired heart disease Cardiac operations 	<p>Didactic; Lectures Clinical rounds</p>	<p>-log book - one MCQ examination at the second year -Oral and written exam</p>
<p>B. Demonstrate surgical anatomy & pathology Principles& details of Thorax, bronchopulmonary segmentation and mediastinum</p>		
<p>C. State update and evidence based Knowledge of of local anaesthesia, bronchodilators, Atropine & haemostatic drugs</p>		
<p>D. Memorize the facts and principles of the relevant basic supportive sciences related to</p>		

CARDIOTHORACIC surgery.		
E. Mention the basic ethical and medicolegal principles relevant to cardiothoracic surgery		
F. Mention the basics of quality assurance to ensure good clinical care in cardiothoracic surgery.		
G. Mention the ethical and scientific principles of medical research.		
H. State the impact of common health problems in the field of cardiothoracic surgery on the society.		

B-Intellectual outcomes

See Intellectual outcomes unit 1

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-log book - One MCQ examination at the second half of the second year
B. Order the following non invasive& invasive diagnostic procedures Chest X-ray CT chest Pleural aspiration Bronchoscopy ECG Echocardiography	-Clinical round with senior staff Observation Post graduate teaching	- Log book - Chick list
C- Interpret the following non invasive& invasive diagnostic procedures mentioned IN B		
D-Perform the following non invasive& invasive diagnostic procedures : -Pleural aspiration		
E. Prescribe the following non invasive &invasive therapeutic procedures : Fibro-optic Bronchoscopy Rigid bronchoscopy Transbronchial needle aspiration Autofluorescence bronchoscopy Endobronchial ultrasound Laser bronchoscopy	Clinical round with senior staff	-Procedure presentation - Log book - Chick list

<p>Endobronchial electrosurgery and argon-plasma Coagulation</p> <p>Endobronchial cryotherapy</p> <p>Airway stents</p> <p>Endobronchial brachytherapy</p> <p>Photodynamic therapy</p>		
<p>F. carry out patient follow up plans for the following problems</p> <p>1-endobronchial tumors either benign or malignant</p> <p>2-Mediastinal space occupying lesions</p> <p>3-Follow up of inserted stents</p>	<p>Clinical round with senior staff</p> <p>-Perform under supervision of senior staff</p>	<p>-Procedure presentation</p> <p>- Log book</p> <p>- Chick list</p>
<p>G. Counsel and educate patients and their family about 5 years survival of bronchogenic carcinoma and end-of-life care</p>	<p>Clinical round with senior staff</p>	<p>- Procedure presentation</p> <p>- Log book</p> <p>- Chick list</p>
<p>H Provide health care services aimed at preventing the following conditions:</p> <p>Bronchogenic carcinoma by carrying out smoking cessation programs and prevention of air pollution</p>	<p>Clinical round with senior staff</p>	
<p>I. Work with health care professionals, including those from other disciplines, to provide patient-focused care for the following:</p> <p>Nutrition and end of life care</p>		
<p>J- Use information technology to support patient care decisions and patient education for the above mentioned conditions:</p> <p>Design internet homepages and follow up patients for smoking cessation and fighting air pollution.</p>		
<p>K- perform practice-based improvement activities using a systematic methodology in one of this module's problems:</p> <p>Multimodality approach for lung cancer management</p>		

D-General Skills
See general skills in unit

Unit (Module) 6 Vascular Surgery

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> - Acute ischaemia of the limbs - Chronic ischaemia of the limbs - Arterial aneurysms - Diabetic foot - Gangrene - Venous thrombosis - Varicose veins of lower limbs 	<p>Didactic; Lectures Clinical rounds Tutorial</p>	<p>-log book - one MCQ examination at the second year -Oral and written exam</p>
B. Outline principle of surgical pathology and pathophysiology of conditions mentioned in AA .		
C. State update and evidence based Knowledge of Pharmacological treatment and surgical management of conditions mentioned in AA.		
D . Memorize the facts and principles of the relevant basic supportive sciences related to vascular surgery..		
E. Mention the basic ethical and medicolegal principles relevant to vascular surgery.		
F. Mention the basics of quality assurance to ensure good clinical care in vascular surgery		
G. Mention the ethical and scientific principles of medical research.		
H. State the impact of common health problems in the field of vascular surgery on the society.		

B-Intellectual outcomes

See unit 1

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-log book - One MCQ examination at the second half of the second year
B. Order the following non invasive &invasive diagnostic procedures -Routine appropriate Laboratory investigations related to conditions Duplex.	-Clinical round with senior staff Observation Post graduate teaching	- Log book - Chick list
C. Interpret the following non invasive &invasive diagnostic procedures -Routine appropriate Lab investigations related to conditions mentioned in A.A	Clinical round with senior staff	-Procedure presentation - Log book - Chick list
D. Perform the following noninvasive& invasive diagnostic and therapeutic procedures. - Duplex, - Embolectomy, - Amputations.	Clinical round with senior staff -Perform under supervision of senior staff	-Procedure presentation - Log book - Chick list
E. Prescribe the following non invasive/invasive therapeutic procedures: -Prescribe proper treatment for conditions mentioned in A.A	Clinical round with senior staff	- Procedure presentation - Log book - Chick list

F. Carry out patient management plans for common conditions related to vascular surgery.	Clinical round with senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to vascular surgery.		
H-Provide health care services aimed at preventing health problems related to vascular surgery like: -mentioned above		
I-Provide patient-focused care in common conditions related to vascular surgery, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A.		

D-General Skills
See general skills in unit 1

Unit (Module) 7 Plastic Surgery

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions</p> <ol style="list-style-type: none"> 1- Malignant neoplasm of skin 2- Haemangiomas 3- Skin Defects and flaps 4- Raw area and Grafts 5- Reduction plastic surgery 6- Augmentation plastic surgery 7- Correction of congenital anomalies. 	<p>Didactic; Lectures Clinical rounds tutorial</p>	<p>-log book - one MCQ examination at the second year -Oral and written exam</p>
<p>B. Illustrate Anatomic Principles of the following- and Related surgical pathology:</p> <ul style="list-style-type: none"> -Skin and Subcutaneous tissue -Breast -Nose. 		
<p>C. State update and evidence based Knowledge of</p> <ul style="list-style-type: none"> - Skin tumors & - burns. Haemangiomas 		
<p>D. Memorize the facts and principles of the relevant basic supportive sciences related to Plastic surgery.</p>		
<p>E. Mention the basic ethical and medicolegal principles relevant to Plastic surgery.</p>		
<p>F. Mention the basics of quality assurance to ensure good clinical care in Plastic surgery</p>		
<p>G. Mention the ethical and scientific principles of medical research.</p>		
<p>H. State the impact of common health problems in the field of Plastic surgery on the society.</p>		

B-Intellectual outcomes

See unit 1

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-log book - One MCQ examination at the second half of the second year
B. Order the following non invasive& invasive diagnostic procedures -Biopsy -CT Scan	-Clinical round with senior staff Observation Post graduate teaching	- Log book - Chick list
c- Interpretate the following non invasive& invasive diagnostic procedures -Biopsy -CT Scan		
D. Carry out patient management plans for the problems above mentioned in AA	Clinical round with senior staff	-Procedure presentation - Log book - Chick list
E. Counsel and educate patients and their family about above mentioned problems.	Clinical round with senior staff -Perform under supervision of senior staff	-Procedure presentation - Log book - Chick list

F. Provide health care services aimed at preventing some of the congenital anomalies and neoplasms of the skin	Clinical round with senior staff	<ul style="list-style-type: none"> - Procedure presentation - Log book - Chick list
G. Work with health care professionals, including those from other disciplines, to provide patient-focused care.	Clinical round with senior staff	
H. Use information technology to support patient care decisions and patient education for the above mentioned conditions.		
I-Provide health care services aimed at preventing health problems related to plastic surgery like		
J-Provide patient-focused care in common conditions related to plastic surgery, while working with health care professionals, including those from other disciplines like Conditions mentioned Above		

D-General Skills

See general skills in unit 1

**4. Unit contents (topic s/modules/rotation
Unit Matrix**

Time Schedule: Second part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
Unit 1 GIT Surgery				
Congenital anomalies of the esophagus	A ,D,F-H	A-D	A-I	A-R
Congenital diaphragmatic hernia	A,D,F-H	A-D	A-I	A-R
Esophageal injuries	A,D,F-H	A-D	A-I	A-R
Neuromuscular abnormalities	A-H	A-D	A-I	A-R
Esophageal hiatus hernia	D,F-H,A,C	A-D-	A-I	A-R
Esophageal carcinoma	A,D,F-H	A-D-	A-I	A-R
Dysphagia	B,D-H	A-D	A-I	A-R-
Congenital hypertrophic pyloric stenosis	A,D-H	A-D	A-I	A-R
Acute gastric dilatation	B-H	A -D	A-I	A-R
Peptic ulcer	B-H	A-D	A-I	A-R
Complication gastric operations	B-H	A-D	A-I	A-R
Neoplasms of the stomach	A,D-H	A-D	A-I	A-R
Gastrectomy	A-H	A-D	A-I	A-R
Liver trauma	A,C,	A-D	A-I	A-R
Infection of the liver	A,C	A-D	A-I	A-R
Portal hypertension	B	A-D	A-I	A-R
Liver tumors	C	A-D	A-I	A-R
Congenital anomalies of gall bladder and bile duct	A,C	A-D	A-I	A-R
Gall stones	A,D-H	A-D	A-I	A-R
Stricture of the biliary tract	A,D-H	A-D	A-I	A-R
Carcinoma of the gall bladder	A,D-H	A-D	A-I	A-R

Jaundice	A,D-H	A-D	A-I	A-R
Congenital anomalies of the pancreas	A,E	A-D	A-I	A-R
Pancreatic neoplasm	A,C,D,E	A-D	A-I	A-R
Congenital anomalies	A	A-D	A-I	A-R
Rupture of spleen	A,D	A-D	A-I	A-R
Infections of spleen	A	A-D	A-I	A-R
Cyst of spleen	A	A-D	A-I	A-R
Tumors the spleen	A	A-D	A-I	A-R
Splenomegaly	A,B	A-D	A-I	A-R
Hemolytic anemia	B	A-D	A-I	A-R
Hypersplenism	B	A-D	A-I	A-R
splenectomy	A,D-H	A-D	A-I	A-R
Peritonitis	A-H	A-D	A-I	A-R
Interapertoneal abscess	A,H	A-D	A-I	A-R
Peritoneal tumors	A	A-D	A-I	A-R
Ascites	B	A-D	A-I	A-R
Torsion of omentum	A	A-D	A-I	A-R
Mesenteric cyst	A	A-D	A-I	A-R
Mesenteric lymphadenitis	A	A-D	A-I	A-R
Retroperitoneal tumors	A	A-D	A-I	A-R
Principles of Colonic Surgery	B,D	A-D	A-I	A-R
Intestinal stoma	A,D	A-D	A-I	A-R
Congenital anomalies	A,D	A-D	A-I	A-R
Intestinal trauma	A,C,D	A-D	A-I	A-R
Intestinal fistula	A	A-D	A-G	A-R
Intestinal diverticulae	A	A-D	A-F	A-R
Inflammatory bowel disease	A,F-H	A-D	A-F	A-R
Intestinal ischemia	A,F-H	A-D	A-E	A-R
Intestinal tumors	A,F-H	A-D	A-E	A-R
Intestinal obstruction	A,C-H	A-D	A-D	A-R
Rectal prolapse	A,C-H	A-D	A-D	A-R
Appendicitis	A,C-H	A-D	A-E	A-R

Neoplasm of the appendix	A,E-H	A-D	A-E	A-R
Pilonidal sinus	A,E	A-D	A-G	A-R
Anal fissure	A,E	A-D	A-F	A-R
Hemorrhoids	A,E	A-D	A-F	A-R
Anorectal abscess	A,E	A-D	A-F	A-R
anal fistula	A,E	A-D	A-F	A-R
fecal incontinence	A,E	A-D	A-F	A-R
anal canal and anal verge tumors	A,E	A-D	A-F	A-R
Unit 2 Breast and Endocrinal Surgery				
Developmental abnormalities of thyroglossal duct	A-E	A-D	A-I	A-R
Goiter	A-E	A-D	A-I	A-R
Hyperparathyroidism	A-E	A-D	A-I	A-R
Hypoparathyroidism	A-E	A-D	A-I	A-R
Adrenal tumors	A-E	A-D	A-I	A-R
Congenital anomalies of the breast	A-E	A-D	A-I	A-R
Inflammation of the breast	A-E	A-D	A-I	A-R
Fibrocystic diseases of the breast	A-E	A-D	A-I	A-R
Cyst of the breast	A-E	A-D	A-I	A-R
Nipple discharge	A-E	A-D	A-I	A-R
Breast neoplasm	A-E	A-D	A-I	A-R
Diseases of male Breast	A-E	A-D	A-I	A-R
Developmental abnormalities of thyroglossal duct	A-E	A-D	A-I	A-R
Goiter	A-E	A-D	A-I	A-R
Hyperparathyroidism	A-E	A-D	A-I	A-R
Hypoparathyroidism	A-E	A-D	A-I	A-R
Adrenal tumors	A-E	A-D	A-I	A-R

Congenital anomalies of the breast	A-E	A-D	A-I	A-R
Inflammation of the breast	A-E	A-D	A-I	A-R
Fibrocystic diseases of the breast	A-E	A-D	A-I	A-R
Cyst of the breast	A-E	A-D	A-I	A-R
Nipple discharge	A-H	A-D	A-I	A-R
Breast neoplasm	A-H	A-D	A-I	A-R
Diseases of male Breast	A-H	A-D	A-I	A-R
<i>Unit 3 Maxillofacial and Neck Surgery</i>				
Congenital anomalies of the face and tongue	A-H	A-D	A-J	A-R
Maxillofacial injuries	A-H	A-D	A-J	A-R
Infections of the face and tongue	A-H	A-D	A-J	A-R
Neoplasms of the tongue and jaws	A-H	A-D	A-J	A-R
Diseases of the salivary glands	A-H	A-D	A-J	A-R
Differential diagnosis of neck masses and their treatment	A-H	A-D	A-J	A-R
<i>Unit 4 Abdominal Wall, Hernias, Testis And Scrotal Surgery</i>				
Abdominal incision	A-I	A-D	A-K	A-R
Disease of abdominal wall	A-I	A-D	A-K	A-R
Inguinal Hernia	A-I	A-D	A-K	A-R
Femoral Hernia	A-I	A-D	A-K	A-R
Umbilical Hernia	A-I	A-D	A-K	A-R
Epigastric Hernia	A-I	A-D	A-K	A-R
Other rare types of Hernias	A-I	A-D	A-K	A-R
Congenital anomalies of the testis	A-I	A-D	A-K	A-R
Inflammatory, conditions of testis and spermatic cord	A-I	A-D	A-K	A-R

Neoplasm of the testis	A-I	A-D	A-K	A
Varicocele	A-I	A-D	A-K	A
Hydrocele	A-I	A-D	A-K	A
Fournier's gangrene	A-I	A-D	A-K	A
Carcinoma of the Pines	A-I	A-D	A-K	A
Unit 5 Cardiothoracic surgery				
Chest injuries	A,D-H	A-D	A-K	A-R
chest wall and pleural infections	A,D-H	A-D	A-K	A-R
tumors of Ribs, lung and pleura	A,D-H	A-D	A-K	A-R
Post-operative Atelectasis	A,D-H	A-D	A-K	A-R
Lung Abscess	A,D-H	A-D	A-K	A-R
Bronchiectasis	A,D-H	A-D	A-K	A-R
Pulmonary TB	A,D-H	A-D	A-K	A-R
Actinomycosis	A,D-H	A-D	A-K	A-R
Cysts	A,D-H	A-D	A-K	A-R
Pulmonary embolism	A,D-H	A-D	A-K	A-R
Post operative Complications	A,D-H	A-D	A-K	A-R
Thymus Gland	A,D-H	A-D	A-K	A-R
Mediastinum	B	A-D	A-K	A-R
Cardiac injuries	A-H	A-D	A-K	A-R
Cardiac arrest	C,B	A-D	A-K	A
Pediatric Congenital heart Disease	A,D-H	A-D	A-K	A-R
Acquired heart disease	A,D-H	A-D	A-K	A-R
Cardiac operations	A,D-H	A-D	A-K	A-R
Unit 6 Vascular surgery				
Acute ischemia	A-G	A-D	A-I	A-R
Chronic ischemia.	A-G	A-D	A-I	A-R
Venous Thrombosis	A-G	A-D	A-I	A-R
Heamangiomas	A-G	A-D	A-IA	A-R
Varicose Vein.	A-G	A-D	A-IA	A-R

Diabetic foot	A-G	A-D	A-I	A-R
Unit 7 Plastic surgery				
Malignant neoplasm of skin	A-H	A-D	A-J	A-R
Haemangiomas	A-H	A-D	A-J	A-R
Skin Defects and flaps	A-H	A-D	A-J	A-R
Raw area and Grafts	A-H	A-D	A-J	A-R
Reduction plastic surgery	A-H	A-D	A-J	A-R
Augmentation plastic surgery	A-H	A-D	A-J	A-R
Burns	A-H	A-D	A-J	A-R

5. Course Methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Outpatient
3. Inpatient
4. Case presentation
5. Direct observation
6. journal club
7. Critically appraised topic.
8. Educational prescription
9. Clinical rounds
10. Clinical rotation
11. Senior staff experience
12. Case log
13. Observation and supervision
14. Written & oral communications
15. Simulation
16. Hand on work shop
17. Service teaching
18. Perform under supervision of senior staff
19. Postgraduate teaching

6. Course Methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

1. Oral examination
2. Clinical examination
3. Written examination
4. Objective structure clinical examination (OSCE)
5. Procedure/case Log book and Portfolios
6. Simulation
7. Record review (report)
8. Patient survey
9. 360o global rating
10. Check list evaluation of live or recorded performance
11. MCQ Exam

ii. Time schedule: At the end of second part

iii. Marks 1200

8. List of references

i. Lectures notes

Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Bailey & Love's Short Practice of Surgery, 27th Edition, 2018
- Current Diagnosis and Treatment Surgery, 15th Edition 2020
- Skandalakis' McGraw-Hill's: Textbook of Surgical Anatomy , 11th ed. Saunders, 2006.
- Gray's Anatomy , the 42nd (October 2020),
KUMAR, V., COTRAN, R.S., and ROBBINS, S.L. Robbins Basic Pathology. 7th ed. 2002

iii. Recommended books

- Maingot's Abdominal Operations. 13th edition 13th Edition

iv. Periodicals, Web sites, ... etc

- American Journal of General Surgery
- GIT
- Abdomen
- BJS
- European Journal of General surgery
- Egyptian Journal of General Surgery
- Journal of Hepatology
- v. Others

None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

ANNEX 2

Program Academic Reference Standards (ARS)

1- Graduate attributes for master degree in General surgery

The Graduate (after residence training and master degree years of study) must:

1- Have the capability to be a scholar, understanding and applying basics, methods and tools of scientific research and clinical audit ***in General Surgery.***

2- Appraise and utilise scientific knowledge to continuously update and improve clinical practice in related speciality.

3- Acquire sufficient medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care in the field of ***General Surgery.***

4- Provide patient care that is appropriate, effective and compassionate for dealing with common health problems and health promotion using evidence-based and updated information.

5- Identify and share to solve health problems in his speciality.

6- Acquire all competencies –including the use of recent technologies- that enable him to provide safe, scientific, and ethical and evidence based clinical care including update use of new technology in ***General Surgery.***

7- Demonstrate interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public.

8- Function as supervisor, and trainer in relation to colleagues, medical students and other health professions.

9- Acquire decision making capabilities in different situations related to ***General surgery.***

10- Show responsiveness to the larger context of the health care system, including e.g. the organisation of health care,

partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.

11- Be aware of public health and health policy issues and share in system-based improvement of health care.

12- Show appropriate attitudes and professionalism.

13- Demonstrate skills of lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages in ***General surgery*** or one of its subspecialties.

2- Competency based Standards for clinical master degree graduates

2.1- Knowledge and understanding

By the end of the program, the graduate should demonstrate satisfactory knowledge and understanding of

2-1-A- Established basic, biomedical, clinical, epidemiological and behavioral sciences related conditions, problem and topics.

2-1-B- The relation between good clinical care of common health problems in the speciality and the welfare of society.

2-1-C- Up to date and recent developments in common problems related to ***General surgery***

2-1-D- Ethical and medicolegal principles relevant to practice in ***General surgery***

2-1-E- Quality assurance principles related to the good medical practice in ***General surgery***

2-1-F- Ethical and scientific basics of medical research.

2.2- Intellectual skills:

By the end of the program, the graduate should be able to demonstrate the following:

2-2-A- Correlation of different relevant sciences in the problem solving and management of common diseases of ***General surgery***.

2-2-B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to ***General surgery***.

2-2-C- Demonstrating systematic approach in studying clinical problems relevant to ***General surgery***.

2-2-D- Making alternative decisions in different situations in ***General surgery***.

2.3- Clinical skills

By the end of the program, the graduate should be able to

2-3-A- Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

2-3-B- Demonstrate patient care skills relevant to ***General surgery*** for patients with common diseases and problems.

2-3- C- Write and evaluate reports for situations related to the field of **General surgery**.

2.4- General skills

By the end of the program, the graduate should be able to

✚ Competency-based outcomes for Practice-based Learning and Improvement

2-4-A- Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence,, improvements in patient care and risk management.

2-4-B- Use all information sources and technology to improve his practice.

2-4-C- Demonstrate skills of teaching and evaluating others.

✚ Competency-based objectives for Interpersonal and Communication Skills

2-4-D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.

✚ Competency-based objectives for Professionalism

2-4-E- Demonstrate professionalism behaviors, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

✚ Competency-based objectives for Systems-based Practice

2-4-F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.

2-4-g- Demonstrate skills of effective time management.

2-4-H- Demonstrate skills of self and continuous learning.

Annex 3, Methods of teaching/learning

Annex 3, Methods of teaching/learning

	Patient care	Medical knowledge	Practice-based learning/Improvement	Interpersonal and communication skills	Professionalism	Systems-based practice
Didactic (lectures, seminars, tutorial)	X	X		X	X	X
journal club,	X	X	X			
Educational prescription	X	X	X	X	X	X
Present a case (true or simulated) in a grand round	X	X	X	X	X	
Observation and supervision	X		X	X	X	X
conferences		X	X	X		X
Written assignments	X	X	X	X	X	X
Oral assignments	X	X	X	X	X	X

Teaching methods for knowledge

- ❖ Didactic (lectures, seminars, tutorial)
- ❖ journal club
- ❖ Critically appraised topic
- ❖ Educational prescription (a structured technique for following up on clinical questions that arise during rounds and other venues).
- ❖ Present a case (true or simulated) in a grand round
- ❖ Others

Teaching methods for patient care

- ❖ Observation and supervision /Completed tasks procedure/case logs
- ❖ On-the-job” training without structured teaching is not sufficient for this skill (checklists).
- ❖ Simulation is increasingly used as an effective method for skill/ teamwork training.

Teaching methods for other skills

- ❖ Written communication (e.g., orders, progress note, transfer note, discharge summary, operative reports, and diagnostic reports).
- ❖ Oral communication (e.g., presentations, transfer of care, interactions with patients, families, colleagues, members of the health care team) and/or non verbal skills (e.g., listening, team skills)
- ❖ Professionalism, including medical ethics, may be included as a theme throughout the program curriculum that includes both didactic and experiential components (e.g., may be integrated into already existing small group discussions of vignettes or case studies and role plays, computer-based modules) and may be modeled by the faculty in clinical practice and discussed with the resident as issues arise during their clinical practice.

Annex 4, Assessment methods

Annex 4, ILOs evaluation methods for Master Degree students.

Method	Practical skills	K	Intellectual	General skills			
	Patient care	K	I	Practice-based learning/Improvement	Interpersonal and communication skills	Professionalism	Systems-based practice
Record review	X	X	X		X	X	X
Checklist	X				X		
Global rating	X	X	X	X	X	X	X
Simulations	X	X	X	X	X	X	
Portfolios	X	X	X	X	X		
Standardized oral examination	X	X	X	X	X		X
Written examination	X	X	X	X			X
Procedure/case log	X	X					
OSCE	X	X	X	X	X	X	X

Annex 4, Glossary of Master Degree doctors assessment methods

- ❖ Record Review – Abstraction of information from patient records, such as medications or tests ordered and comparison of findings against accepted patient care standards.
- ❖ Chart Stimulated Recall – Uses the MSc doctor’s patient records in an oral examination to assess clinical decision-making.
- ❖ Mini clinical evaluation: Evaluation of Live/Recorded Performance (single event) – A single resident interaction with a patient is evaluated using a checklist. The encounter may be videotaped for later evaluation.
- ❖ Standardized Patients (SP) – Simulated patients are trained to respond in a manner similar to real patients. The standardized patient can be trained to rate MSc doctor’s performance on checklists and provide feedback for history taking, physical examination, and communication skills. Physicians may also rate the MSc doctor’s performance.
- ❖ Objective Structured Clinical Examination (OSCE) – A series of stations with standardized tasks for the MSc doctors to perform. Standardized patients and other assessment methods often are combined in an OSCE. An observer or the standardized patient may evaluate the MSc doctors.
- ❖ Procedure or Case Logs – MSc doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- ❖ PSQs – Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by a MSc doctors.

- ❖ Case /problems – assess use of knowledge in diagnosing or treating patients or evaluate procedural skills.
- ❖ Models: are simulations using mannequins or various anatomic structures to assess procedural skills and interpret clinical findings. Both are useful to assess practice performance and provide constructive feedback.
- ❖ 360 Global Rating Evaluations – MSc doctors, faculty, nurses, clerks, and other clinical staff evaluate MSc doctors from different perspectives using similar rating forms.
- ❖ Portfolios – A portfolio is a set of project reports that are prepared by the MSc doctors to document projects completed during the MSc study years. For each type of project standards of performance are set. Example projects are summarizing the research literature for selecting a treatment option, implementing a quality improvement program, revising a medical student clerkship elective, and creating a computer program to track patient care and outcomes.
- ❖ Examination MCQ – A standardized examination using multiple-choice questions (MCQ). The in-training examination and written board examinations are examples.
- ❖ Examination Oral – Uses structured realistic cases and patient case protocols in an oral examination to assess clinical decision-making.
- ❖ Procedure or Case Logs – MSc doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- ❖ PSQs – Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by MSc doctors.

Annex 5, Program evaluation tools

By whom	Method	sample
Quality Assurance Unit	Reports Field visits	#
External Evaluator (s):According to department council External Examiner (s): According to department council	Reports Field visits	#
Stakeholders	Reports Field visits questionnaires	#
Senior students	questionnaires	#
Alumni	questionnaires	#

Annex 6, Program Correlations:

مصفوفة توافق المعايير القومية القياسية العامة لبرامج الماجستير مع المعايير الأكاديمية
 المعتمدة من كلية الطب □ جامعة أسيوط لدرجة الماجستير في
 □ الجراحة العامة
 □

I- General Academic Reference Standards (GARS) versus Program ARS

1- Graduate attributes

Faculty ARS	NAQAAE General ARS for Postgraduate Programs
1- Have the capability to be a scholar, understanding and applying basics, methods and tools of scientific research and clinical audit in <i>General surgery</i>	1- إجادة تطبيق أساسيات و منهجيات البحث العلمي واستخدام أدواته المختلفة
2- Appraise and utilise scientific knowledge to continuously update and improve clinical practice in <i>General surgery</i>	2- تطبيق المنهج التحليلي واستخدامه في مجال التخصص
3- Acquire sufficient medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care in <i>General surgery</i> .	3- تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في ممارسته المهنية
4- Provide patient care that is appropriate, effective and compassionate for dealing with common health problems and health promotion using evidence-based and update information.	4- إظهار وعيا بالمشاكل الجارية و الرؤى الحديثة في مجال التخصص
5- Identify and share to solve health problems in <i>General surgery</i>	5- تحديد المشكلات المهنية و إيجاد حلول لها
6- Acquire all competencies that enable him to provide safe, scientific, ethical and evidence based clinical care including update use of new	6- إتقان نطاق مناسب من المهارات المهنية المتخصصة، واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته

technology in <i>General surgery</i> .	المهنية
<p>7- Demonstrate interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public.</p> <p>8- Function as supervisor, and trainer in relation to colleagues, medical students and other health professions.</p>	<p>7- التواصل بفاعلية و القدرة على قيادة فرق العمل</p>
<p>9- Acquire decision making capabilities in different situations related to <i>General surgery</i></p>	<p>8- اتخاذ القرار في سياقات مهنية مختلفة</p>
<p>10- Show responsiveness to the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.</p>	<p>9- توظيف الموارد المتاحة بما يحقق أعلى استفادة و الحفاظ عليها</p>
<p>11- Be aware of public health and health policy issues and share in system-based improvement of health care.</p>	<p>10- إظهار الوعي بدوره في تنمية المجتمع و الحفاظ على البيئة في ضوء المتغيرات العالمية و الإقليمية</p>
<p>12- Show appropriate attitudes and professionalism.</p>	<p>11- التصرف بما يعكس الالتزام بالنزاهة و المصداقية و الالتزام بقواعد المهنة</p>
<p>13- Demonstrate skills of lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages in <i>General surgery</i> or one of its subspecialties.</p>	<p>12- تنمية ذاته أكاديميا و مهنيا و قادرا علي التعلم المستمر</p>

2. Academic standard

Faculty ARS	NAQAAE General ARS for Postgraduate Programs
2.1.A -Established basic, biomedical, clinical, epidemiological and behavioral sciences related conditions, problems and topics.	2-1-أ-النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة.
2.1.B- The relation between good clinical care of common health problems in <i>General surgery</i> and the welfare of society.	2-1-ب-التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة.
2.1. C- Up to date and recent developments in common problems related to <i>General surgery</i> .	2-1-ج-التطورات العلمية في مجال التخصص.
2.1. D- Ethical and medicolegal principles relevant to practice in the <i>General surgery</i> .	2-1-د-المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص.
2.1. E-Quality assurance principles related to the good medical practice in <i>General surgery</i>	2-1-هـ- مبادئ و أساسيات الجودة في الممارسة المهنية في مجال التخصص
2.1. F- Ethical and scientific basics of medical research.	2-1-و- أساسيات وأخلاقيات البحث العلمي

<p>2.2. A-Correlation of different relevant sciences in the problem solving and management of common diseases of <i>General surgery</i></p> <p>2.2. B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to <i>General surgery</i>.</p>	<p>2-2-أ- تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكل</p>
<p>2.2. B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to <i>General surgery</i>.</p>	<p>2-2-ب- حل المشاكل المتخصصة مع عدم توافر بعض المعطيات</p>
<p>2.2. A-Correlation of different relevant sciences in the problem solving and management of common diseases of <i>General surgery</i>.</p>	<p>2-2-ج- الربط بين المعارف المختلفة لحل المشاكل المهنية</p>
<p>2.2. C- Demonstrating systematic approach in studying clinical problems relevant to the <i>General surgery</i>.</p>	<p>2-2-د- إجراء دراسة بحثية و /أو كتابة دراسة علمية منهجية حول مشكلة بحثية</p>
<p>2.4.A-Demonstrate practice-based learning and Improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care</p>	<p>2-2-هـ- تقييم المخاطر في الممارسات المهنية في مجال التخصص</p>

and risk management	
2.4.A-Demonstrate practice-based learning and Improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management	2-2-2-و- التخطيط لتطوير الأداء في مجال التخصص
2.2.D- Making alternative decisions in different situations in the field of <i>General surgery</i> .	2-2-2-ز- اتخاذ القرارات المهنية في سياقات مهنية متنوعة
2.3.A- provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. 2.3.B- Demonstrate patient care skills relevant to <i>General surgery</i> for patients with common diseases and problems.	2-3-2-أ- إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص
2.3.C- Write and evaluate reports for Situation related to <i>General surgery</i> .	2-3-2-ب- كتابة و تقييم التقارير المهنية
2.3.A- provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. 2.3.B- Demonstrate patient care skills relevant to that speciality for patients	2-3-2-ج- تقييم الطرق و الأدوات القائمة في مجال التخصص

with common diseases and problems.	
2.4.D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.	2-4-أ-التواصل الفعال بأنواعه المختلفة
2.4.A-Demonstrate practice-based learning and improvement skills investigation that involves and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management 2.4.B- Use all information sources and technology to improve his practice.	2-4-ب- استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية
2.4.A-Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management 2.4.B- Use all information sources and technology to improve his practice. 2.4.E-Demonstrate professionalism behavior, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse	2-4-ج- التقييم الذاتي وتحديد احتياجاته التعليمية الشخصية

patient population.	
2.4.A-Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, , improvements in patient care and risk management.	2-4-2-د- استخدام المصادر المختلفة للحصول على المعلومات و المعارف
2.4. C- Demonstrate skills of teaching and evaluating others.	2-4-2-هـ- وضع قواعد ومؤشرات تقييم أداء الآخرين
2.4. F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.	2-4-2-و- العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة
2.4.G- Demonstrate skills of effective time management.	2-4-2-ز- إدارة الوقت بكفاءة
2.4.H- Demonstrate skills of self and continuous learning.	2-4-2-ح- التعلم الذاتي و المستمر

Comparison between ARS and ILOS for Master degree in General surgery.

(ARS)	(ILOS)
<p><u>2-1- Knowledge and understanding</u></p> <p>2-1-A- Established basic, biomedical, clinical, epidemiological and behavioral sciences related conditions, problem and topics.</p>	<p><u>2-1- Knowledge and understanding</u></p> <p>2-1-A- Explain the essential facts and principles of relevant basic sciences including Surgical Anatomy, Surgical Pathology, Microbiology, Pharmacology related to General Surgery.</p> <p>2-1-B- Mention <u>essential facts</u> of clinically supportive sciences related to <i>General surgery</i></p> <p>2-1-C- Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to <i>General surgery</i></p>
<p>2-1-B The relation between good clinical care of common health problem in <i>General surgery</i> and the welfare of society.</p>	<p>2-1-H- State the impact of common health problems in <i>General surgery</i> on the society and how good clinical practice improve these problems.</p>
<p>2-1-C- Up to date and recent developments in common Problems related to <i>General surgery</i>.</p>	<p>2-1-C- Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to <i>General surgery</i></p>

	2-1-D- Give the recent and update developments in the pathogenesis, diagnosis, prevention and treatment of common diseases related to <i>General surgery</i> .
2-1-D- Ethical and medico legal Principles relevant to practice in <i>General surgery</i>	2-1-E- Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to <i>General surgery</i>
2-1-E- Quality assurance principles related to the good medical practice in <i>General surgery</i>	2-1-F- Mention the basics and standards of quality assurance to ensure good clinical practice in <i>General surgery</i>
2-1-F- Ethical and scientific basics of medical research.	2-1-G- Mention the ethical and scientific principles of medical research methodology.
<u>2-2- Intellectual skills:</u> 2-2-A- Correlation of different relevant sciences in the problem solving and management of common diseases of the <i>General surgery</i> .	<u>2-2- Intellectual skills:</u> 2-2-A- Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the <i>General surgery</i> .
2-2-B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to <i>General surgery</i> .	2-2-B- Demonstrate an investigatory and analytic thinking approach (problem solving) to common clinical situations related to <i>General surgery</i> .

<p>2-2-C- Demonstrating systematic approach in studying clinical problems relevant to the <i>General surgery</i> field.</p>	<p>2-2-C- Design and /or present a case or review (through seminars/journal clubs.) in one or more of common clinical problems relevant to the <i>General surgery</i> field.</p>
<p>2-2-D Making alternative decisions in different situations in the field of the <i>General surgery</i>.</p>	<p>2-2-D- Formulate management plans and alternative decisions in different situations in the field of the <i>General surgery</i>.</p>

continuous (ARS)	continuous (ILOs)
<p><u>2-3- Clinical skills:</u></p> <p>2-3-A- Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.</p> <p>2-3-B- Demonstrate patient care skills relevant to that <i>General surgery</i> for patients with common diseases and problems.</p>	<p><u>2/3/1/Practical skills (Patient Care :)</u></p> <p>2-3-1-A- Obtain proper history and examine patients in caring and respectful behaviors.</p> <p>2-3-1-B- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment for common conditions related to <i>General surgery</i>.</p> <p>2-3-1-C- Carry out patient management plans for common conditions related to <i>General surgery</i>.</p> <p>2-3-1-D- Use information technology to support patient care decisions and patient education in common clinical situations related to <i>General surgery</i>.</p> <p>2-3-1-E- Perform competently non invasive and invasive procedures considered essential for the <i>General surgery</i>.</p>

	<p>2-3-1-F- Provide health care services aimed at preventing health problems related to <i>General surgery</i>.</p> <p>2-3-1-G- Provide patient-focused care in common conditions related to <i>General surgery</i>, while working with health care professionals, including those from other disciplines.</p>
<p>2-3-C- Write and evaluate reports for situations related to the field of <i>General surgery</i>.</p>	<p>2-3-1-H Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets. (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records).</p>
<p><u>2-4- General skills</u></p> <p>2-4-A- Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management</p>	<p><u>2/3/2 General skills</u></p> <p>2-3-2-A- Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks).</p> <p>2-3-2-B- Appraises evidence from scientific studies.</p> <p>2-3-2-C- Conduct epidemiological studies and surveys.</p>
<p>2-4-B- Use all information sources and technology to improve his practice.</p>	<p>2-3-2-C- Conduct epidemiological studies and surveys.</p>

	<p>2-3-2-D. Perform data management including data entry and analysis and using information technology to manage information, access on-line medical information; and support their own education.</p>
<p>2-4-C- Demonstrate skills of teaching and evaluating others.</p>	<p>2-3-2-E- Facilitate learning of students other health care professionals including their evaluation and assessment.</p>
<p>2-4-D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.</p>	<p>2-3-2-F- Maintain therapeutic and ethically sound relationship with patients.</p> <p>2-3-2-G- Elicit information using effective nonverbal, explanatory, questioning, and writing skills.</p> <p>2-3-2-H- Provide information using effective nonverbal, explanatory, questioning, and writing skills.</p> <p>2-3-2-I- Work effectively with others as a member of a health care team or other professional group.</p>
<p>2-4-E- Demonstrate professionalism behaviors, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical</p>	<p>2-3-2-J- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.</p> <p>2-3-2-K- Demonstrate a commitment to ethical principles including provision or withholding of clinical care,</p>

<p>principles, and sensitivity to a diverse patient population.</p>	<p>confidentiality of patient information, informed consent, business practices.</p> <p>2-3-2-L-Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.</p>
<p>2-4-F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.</p>	<p>2-3-2-M-Work effectively in relevant health care delivery settings and systems including good administrative and time management</p> <p>2-3-2-N- Practice cost-effective health care and resource allocation that does not compromise quality of care.</p> <p>2-3-2-O- Assist patients in dealing with system complexities.</p>
<p>2-4-G- Demonstrate skills of effective time management</p>	<p>2-3-2-M-Work effectively in relevant health care delivery settings and systems including good administrative and time management</p>
<p>2-4-H- Demonstrate skills of self and continuous learning.</p>	<p>2-3-2-A- Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks).</p>

**III-Program matrix
Knowledge and Understanding**

Course	Program covered ILOs							
	2/1/A	2/1/B	2/1/C	2/1/D	2/1/E	2/1/F	2/1/G	2/1/H
Course 1 : Surgical Pathology & Microbiology	✓							
course 2 : Surgical Anatomy & Pharmacology	✓							
course 3 : General surgery 1	✓	✓	✓	✓				
Course 4 : General Surgery 2	✓	✓	✓	✓	✓	✓	✓	✓

Intellectual

Course	Program covered ILOs			
	2/2/A	2/2/B	2/2/C	2/2/D
Course 1 : Surgical Pathology & Microbiology	✓			
course 2 : Surgical Anatomy & Pharmacology	✓			
course 3 : General surgery 1	✓	✓	✓	✓
Course 4 : General Surgery 2	✓	✓	✓	✓

Practical Skills (Patient Care)

Course	Program covered ILOs							
	2/3/1/A	2/3/1/B	2/3/1/C	2/3/1/D	2/3/1/E	2/3/1/F	2/3/1/G	2/3/1/H
Course 1 : Surgical Pathology & Microbiology								
course 2 : Surgical Anatomy & Pharmacology								
course 3 : General surgery 1	✓	✓	✓	✓	✓	✓	✓	✓
Course 4 : General Surgery 2	✓	✓	✓	✓	✓	✓	✓	✓

General Skills

Course	Program covered ILOs							
	2/3/2 /A	2/3/2 /B	2/3/2 /C	2/3/2 /D	2/3/2 /E	2/3/2 /F	2/3/2 /G	2/3/2 /H
Course 1 : Surgical Pathology & Microbiology								✓
course 2 : Surgical Anatomy & Pharmacology				✓				✓
course 3 : General surgery 1	✓	✓	✓	✓	✓	✓	✓	✓
Course 4 : General Surgery 2	✓	✓	✓	✓	✓	✓	✓	✓

General Skills

Course	Program covered ILOs						
	2/3/2/I	2/3/2/J	2/3/2/K	2/3/2/L	2/3/2/M	2/3/2/N	2/3/2/O
Course 1 : Surgical Pathology & Microbiology			✓		✓		✓
course 2 : Surgical Anatomy & Pharmacology			✓		✓		✓
course 3 : General surgery 1	✓	✓	✓	✓	✓	✓	✓
Course 4 : General Surgery 2	✓	✓	✓	✓	✓	✓	✓

Annex 7,
Additional information:

Department information:

Staff members:

Opportunities within the department:

Department quality control insurance for completing the program:

Quality Assurance Unit of Assiut Faculty of Medicine:

1. Internal evaluator
2. External Evaluator
3. Stakeholders of gradué:
4. Senior students
5. Alumni

Department quality control insurance for completing the program

- + Evaluation by the Department head and staff members.
- + Regular assessments.
- + Log book monitoring.
- + Recent equipments and Specialized Units.

(End of the program specifications)