Medical Doctorate (M.D.) Degree Program and Courses Specifications for General Surgery

(According to currently applied Credit points bylaws)

General Surgery Department

Faculty of Medicine

Assiut University

2021-2022/2022-2023

Contents	
Item	***Page***
Program Specification For General Surgery year 2021-2022/2022-2023	
A. Basic Information	**4**
B. Professional Information **1. Program aims** **2. Intended learning outcomes (ILOs) for the whole program** **3. Program academic standards** **4. Program external references** **5. Program structure and contents** **6. Courses contents (Annex 1)** **7. Admission requirements** **8. Progression and completion requirements** **9. Assessment methods and rules** **10. Program evaluation** **11. Declaration**	**5**
- Annex 1, Courses/ specifications	**21**
Basic science courses **Course 1: Medical statistics.**	**22**
Course 2: Research methodology	**29**
Course 3: Medicolegal Aspects & Ethics in Medical Practice and Scientific Research	**37**
Course 4 Surgical Anatomy	**43**
Course 5 Surgical Pathology	**55**
Speciality Courses **1) Course 6 General surgery** **Unit (Module) 1** Principles in General Surgery**.** **Unit (Module) 2** GIT surgery **Unit (Module) 3** Breast and Endocrine Surgery **Unit (Module) 4** Maxillofacial and neck Surgery **Unit (Module) 5** Abdominal wall ,Hernias , Testis and Scrotal Surgery	**63**

M. D. degree of General Surgery

A. Basic Information

- **Program Title:** M. D. degree of General Surgery
- **Nature of the program:** Single.
- **Responsible Department:** Department of General Surgery Faculty of Medicine- Assiut University.
- **Program Director (Head of the Department):** Prof. Mostafa Hamed
- **Coordinator (s):**

Principle coordinator: Prof. Samir Ammar
Prof. Mohamed korni

- **Internal evaluators:**

Prof . Gamal Abdel Hamiud.
Prof. Abdel Rady Abdel Salam,
Prof. Moustafa Hamd

- **External evaluator:** 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: 6** courses
- First part: 5 courses.
- Second part : 1 course.

B. Professional Information

1- Program aims

1/1 To enable candidates to keep with satisfactory standards of surgical patients care by mastering high 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 .

1/2 Provide assistant lecturers with fundamental knowledge of surgical intensive care medicine as regards; mastering dealing with critically ill surgical patients, techniques, indications, contraindications and training skills of different intensive care techniques.

1/3 To enable candidates to perform high standard scientific medical research and how to proceed with publication in indexed medical journals.

1/4 To provide the candidates with skills :

- Enabling them to have professional careers as a consultant in Egypt.
- Making them recognized as a consultant abroad.
- Enabling them to continue self learning in subspecialties.
- Enabling them to master different research methodology and do their own.

1/5 To enable candidates to have professional careers as a consultant in Egypt but recognized abroad.

1/6 To enable candidates to continue self learning in subspecialties.

1/7 To enable candidates to master different research methodology and do their own.

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

2/1Knowledge and understanding:

A. Demonstrate in- depth knowledge and understanding of theories, basics and updated biomedical, clinical epidemiological of socio – behavioral science relevant to his speciality as well as the evidence – based application of this knowledge to patient care.
B. Explain basics, methodology, tools and ethics of scientific medical, clinical research.
C. Mention ethical, medico logical principles and bylaws relevant to his practice in the field of General Surgery.
D. Mention principles and measurements of quality assurance and quality improvement in medical education and in clinical practice of General Surgery.
E. Mention health care system, public health and health policy, issues relevant to this speciality and principles and methods of system – based improvement of patient care in common health problems of the field of General Surgery.

2/2 Intellectual outcomes

A. Apply the basic and clinically supportive sciences which are appropriate to the speciality related conditions / problem / topics.
B. Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to General Surgery.
C. Plan research projects.
D. Write scientific papers.
E. Participate in clinical risk management as a part of clinical governance.

F. Plan for quality improvement in the field of medical education and clinical practice in his speciality.

G. Create / innovate plans, systems, and other issues for improvement of performance in his practice.

H. Present and defend his / her data in front of a panel of experts.

I. Formulate management plans and alternative decisions in different situations in the field of General Surgery.

2/3 Skills

2/3/1 Practical skills (Patient Care)

Students will be able to:

A. Provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

p.s. Extensive level means in-depth understanding from basic science to evidence – based clinical application and possession of skills to manage independently all problems in field of practice.

B. Provide extensive level of patient care for patients with all common diagnoses and for uncomplicated procedures related to General Surgery.

C. Provide extensive level of patient care for non-routine, complicated patients and under increasingly difficult circumstances, while demonstrating compassionate, appropriate and effective care.

D. Perform diagnostic and therapeutic procedures considered essential in the field of General Surgery.

E. Handles unexpected complications, while demonstrating compassion and sensitivity to patient needs and concerns.

F. Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families in the General Surgery related situations**.**

G. Gather essential and accurate information about patients of the General Surgery related conditions.

H. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence and clinical judgment for the General Surgery conditions.

I. Develop and carry out patient management plans for General Surgery related conditions.

J. Counsel and educate patients and their families about speciality related conditions.

K. Use information technology to support patient care decisions and patient education in all General Surgery related clinical situations.

L. Perform competently all medical and invasive procedures considered essential for the General Surgery related conditions / area of practices.

M. Provide health care services aimed at preventing the General Surgery related health problems.

N. Lead health care professionals, including those from other disciplines, to provide patient-focused care in General Surgery related conditions**.**

O. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets. (Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible 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. Demonstrate the competency of continuous evaluation of different types of care provision to patients in the different area of General Surgery.
B. Appraise scientific evidence.
C. Continuously improve patient care based on constant self-evaluation and life-long learning.
D. Participate in clinical audit and research projects.
E. Practice skills of evidence-based Medicine (EBM).
F. Educate and evaluate students, residents and other health professionals.
G. Design logbooks.
H. Design clinical guidelines and standard protocols of management.
I. Appraise evidence from scientific studies related to the patients' health problems.
J. Apply knowledge of study designs and statistical methods to the appraisal of clinical studies.
K. Use information technology to manage information, access on-line medical information; for the important topics.

Interpersonal and Communication Skills

L. Master interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals, including:-

- Present a case.
- Write a consultation note.
- Inform patients of a diagnosis and therapeutic plan completing and maintaining comprehensive.
- Timely and legible medical records.
- Teamwork skills.

M. Create and sustain a therapeutic and ethically sound relationship with patients.

N. Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
O. Work effectively with others as a member or leader of a health care team or other professional group.

Professionalism

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

Systems-Based Practice

S. Work effectively in health care delivery settings and systems related to General Surgery including good administrative and time management.
T. Practice cost-effective health care and resource allocation that does not compromise quality of care.
U. Advocate for quality patient care and assist patients in dealing with system complexities.
V. Design, monitor and evaluate specification of under and post graduate course and programs.
W. Act as a chair man for scientific meetings including time management.

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

Academic standards for Medical Doctorate (MD) degree in General Surgery

Assiut Faculty of Medicine developed MD 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 20/3/2010. These standards were revised and approved without changes by the 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)

A. **ACGME (Accreditation Council for Graduate Medical Education).**
http://www.acgme.org/acWebsite/navPages/nav_Public.asp

B. **University of Michigan Health System, General Surgery Fellowship Program**
(http://surgery.med.umich.edu/general)

Comparison between program and speciality external reference		
Item	**General Surgery program**	**University of Michigan Health System, General Surgical Clinical Fellowship Program**
Goals	Matched	Matched
ILOS	Matched	Matched
Duration	4 -6years	Different
Requirement	Different	Different
Program structure	Different	Different

5- Program Structure

A. Duration of program: **4-6 years**

B. Structure of the program:

Total number of credit point = 420 CP

Master degree: 180 credit point

Didactic #: 37 (23.1%), practical 123 (76.9%), total 160 CP

Thesis and researches: 80 CP (33.3%)

First part

Didactic 10 CP (100 %), practical 0(0 %).total 10 CP

Second part

Didactic 24 (16.3 %) practical 123 (83.7 %) total 147

According the currently applied bylaws:

Total courses: 160 credit point

Compulsory courses: 157 credit point (98.1%)

Elective courses: 3 credit point (1.9%)

	Credit points	% from total
Basic science courses	10	4.1%
Humanity and social courses	3	1.2%
Speciality courses	147	61.3%
Others (Computer, …)		0
Field training	123	51.3%
Thesis	40	16.7%
2 published researches	40	16.7%

C- Program Time Table

Duration of program 4 years (could be extended at maximum to 6 years) divided into

- Part 1

Program-related basic science courses

- Medical statistics.
- Research methodology

- Medicolegal Aspects and Ethics in Medical Practice and Scientific Research

Students are allowed to sit the exams of these courses after 6 months from applying to the M D degree.

Students are allowed to sit the exams of the remaining basic science courses after 12 months from applying to the MD degree.

Thesis and 2 published researches

For the M D thesis;

MD thesis subject should be officially registered within 1 year from application to the MD degree,

Discussion and acceptance of the thesis should not be set before 24 months from registering the M D subject;

It could be discussed and accepted either before or after passing the second part of examination

- Part 2

Program –related speciality courses and ILOs

Students are not allowed to sit the exams of these courses before 4 years from applying to the MD degree.

Two elective courses can be set during either the 1st or 2nd parts.

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

Total degrees 1700 marks.

500 marks for first part

1200 for second part

Written exam 40% - 70%.

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

Curriculum Structure: (Courses):

Levels and courses of the program:

Courses and student work load list	Course Code	Core Credit points		
		didactic #	training	total
First Part				
Basic science courses (10 CP)				
Course 1: Medical Statistics and computer	**FAC309A**	1	-	1
Course 2: Research Methodology	**FAC309B**	1	-	1
Course 3: - Medicolegal Aspects & Ethics in Medical Practice and Scientific Research	**FAC310C**	1	-	1
Course 4 Surgical Anatomy	**SUR311A**	3.5	-	3.5
1) Course 5 Surgical Pathology	**SUR311B**	3.5	-	3.5
Elective courses*	3 CP			
Elective course 1		1.5		1.5
Elective course 2		1.5		1.5
Thesis	40 CP			
Published researches**	40 CP			
Second Part	Speciality courses 24 CP Speciality Clinical Work (log Book) 123 CP			
Speciality Courses **1. Course 6 General Surgery."**	**SUR311C**	24		
Speciality Clinical Work (123 CP)	**SUR311C**		123	
Total of second part		24	123	147

* 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#:

- Advanced medical statistics.
- Evidence based medicine.
- Advanced infection control.
- Quality assurance of medical education.
- Quality assurance of clinical practice.
- -Hospital management

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

3. Thesis / Researches:

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

**Another 40 points are appointed to acceptance or publication of one research from the thesis in international indexed medical journals or publication of 2 researches from the thesis in local specialized medical journals.

***Advanced General Surgery Course**

Course 4 :Units' (1-5)	% from total
A- Unit (Module)1 "Principles in General Surgery."	10%
B- Unit (Module)2 " GIT Surgery	70%
C- Unit (Module) 3 " Breast and Endocrine Surgery "	10%
D- Unit (Module)4 " Maxillofacial and neck Surgery "	5%
E- Unit (Module)5 Abdominal wall, Hernias , Testis and Scrotal Surgery "	5%
Total No. of Units:	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
Annex 6 II: Program Matrix

7-Admission requirements

- **Admission Requirements (prerequisites) if any :**
  - **I. General Requirements:**
    - **Master degree in General Surgery.**
  - **II. Specific Requirements:**
    - **Fluent in English (study language)**

VACATIONS AND STUDY LEAVE

The current departmental policy is to give working assistant lecture 3 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 (Medical statistic, Research methodology and Medicolegal Aspects and Ethics in Medical Practice and Scientific Research) could be set at 6 months from registering to the MD degree.
- Students are allowed to sit the exams of the remaining essential courses of the first part after 12 months from applying to the MD degree.

- Examination of the second part cannot be set before 4 years from registering to the degree.
- Discussion of the MD thesis could be set after 2 years from officially registering the MD subject, either before or after setting the second part exams.
- The minimum duration of the program is 4 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 MD thesis.
4. Acceptance or publication of one research from the thesis in international indexed medical journals or publication of 2 researches from the thesis in local specialized medical journals.

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	Oral and/or Practical l Exam		Total
First part					
Basic science courses:					
Course 1: Medical Statistics and computer	FAC309A	35	15	-	50
Course2: Research Methodology	FAC309B	35	15	-	50
Course 3: - Medicolegal Aspects & Ethics in Medical Practice and Scientific Research	FAC310C	35	15	-	50
Course 4 Surgical Anatomy	SUR311A	100	50	25	175
Course 5 Surgical Pathology	SUR311B	100	50	25	175
Total of first part					500
Second Part					
	Course code	written	oral	practical and clinical	total
Speciality Courses		600			
Course 6 " General Surgery **Paper 1** **Paper 2** **Paper 3** **Paper 4**	SUR311C	 150 150 150 150	300	300	
Total of second part		600	300	300	1200
Elective course 1		50	50		100
Elective course 1		50	50		100

* 25% of the oral exam for assessment of logbook

Total degree 1900

500 marks for first part

1200 for second part

Written exam 50% (600 marks).

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

Examination system:

- **First part:**
- Written exam 2 hours in Medical Statistics and Research Methodology + oral examination
- Written exam 1 hours in Medicolegal Aspects and Ethics in Medical Practice and Scientific Research + oral examination
- Written examination Surgical Anatomy (3hour) + oral examination
- Written examination in Surgical pathology (2hour) + oral examination
- **Second part:**
  - Written exam 4 papers 3 hours for each in General surgery + Oral exam+ Clinical /practical exam
- **Elective courses**
  - Written exam one paper 1 hour in Elective course 1 + Oral & Practical exam
  - Written exam one paper 1 hour in Elective course 2 + Oral & Practical exam

10-Program evaluation

By whom	Method	sample
Quality Assurance Unit	Reports Field visits	1
External Evaluator (s):According to department council External Examiner (s): According to department council	Reports Field visits	1 2
Stakeholders	Reports Field visits Questionnaires	12
Senior students	Questionnaires	2
Alumni	Questionnaires	3

#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:	Prof. Samir Ammar		9/2022
Head of the Responsible Department (Program Academic Director):	Prof. Moustafa Hamd		9/2022

Annex 1, Specifications for Courses / Modules

Annex 1: specifications for courses/ modules

First Part

1) **Course 1: Medical statistics**
2) **Course 2: Research Methodology**
3) **Course 3: - Medicolegal Aspects and Ethics in Medical Practice and Scientific Research**
4) **Course 4 Surgical anatomy**

Course 5 Surgical pathology

Course 1: Medical statistics

Name of department: Public Health and Community Medicine

Faculty of medicine

Assiut University

2022-2023

1. Course data

- **Course Title: Medical statistics**
- **Course code: FAC309A**
- **Specialty: offered to all clinical and academic specialties**
- **Number of credit points: 1 credit point**
- **Department (s) delivering the course:** Pubic Health and Community Medicine
- **Coordinator (s):**
  - Course coordinator: Prof. Farag Mohammed Moftah
  - Assistant coordinator (s): Prof. Medhat Araby Khalil Saleh
- Date last reviewed: January -2022
- **Requirements (pre-requisites) if any:**
  - Completed Master degree in any of the academic or clinical departments of Medicine.

2. Course Aims

Enable graduate students to use statistical principles to improve their professional work and develop the concept of critical interpretation of data

3. Intended learning outcomes (ILOs):To be able to use statistical principals to manage data

A knowledge and understanding

ILOS	Methods of teaching/ learning	Methods of Evaluation
A. List the types of variables	Lecture and discussion	Written examination
B. Identify the methods of data collection	Lecture and discussion	Written examination
C. Describe the different sampling strategies	Lecture and discussion	Written examination
D. Identify types of tabular and graphic presentation of data	Lecture and discussion	Written examination
E. Identify measures of central tendency and dispersion	Lecture and discussion	Written examination
F. Identify the characters of normal distribution curve.	Lecture and discussion	Written examination
G. Detect the difference between parametric and non-parametric tests	Lecture and discussion	Written examination
H. Identify the concepts of correlation and regression	Lecture and discussion	Written examination

B. intellectual

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Describe the normal curves.	Lecture& Discussions	Written examination
B. Describe and summarize data	Lecture& Discussions	Written examination
C. Select the proper test of significance	Lecture& Discussions	Written examination
D. Interpret the proper test of significance	Lecture& Discussions	Written examination
E. Describe the difference between parametric and non-parametric tests	Lecture& Discussions	Written examination

C. Practical skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Design data entry files.	Tutorial on SPSS	Assignments SPSS exam
B. Validate data entry.	Tutorial on SPSS	Assignments SPSS exam
C. Manage data files.	Tutorial on SPSS	Assignments SPSS exam
D. Construct tables and graphs.	Tutorial on SPSS	Assignments SPSS exam
E. Calculate measures of central tendency and dispersion.	Tutorial on SPSS	Assignments SPSS exam
F. Select, apply and interpret the proper test of significance.	Tutorial on SPSS	Assignments SPSS exam

D general skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Appraise scientific evidence	Discussions	Research assignment
B. Use information technology to manage information, access on-line medical information; for the important topics.	tutorial	Research and audits' assignment

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

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skills C	General Skills D
Introduction	A-F	A-D	-	A&B
Tables and graphics	D	A-D	-	A&B
Sampling	C	-	-	A&B
Methodology of data collection	B	-	-	A&B
Type of variables	A	-	-	A&B
Proportion test& Chi-square test	E,F	C&D	-	A&B
Student T test& Paired T test	E,F	C&D	F	A&B
ANOVA test	E,F	C&D	F	A&B
Non parametric tests	E,F	C&D	F	A&B
Discrimination analysis factor analysis	E,F	C&D	-	A&B
SPSS Introduction	A-F	A-D	-	A&B
Data entry and cleaning of data	A	A-D	A-C	A&B
Transforming of variables	A	A&B	A-C	A&B
Descriptive statistics	D	A-D	D&E	A&B
Graphic presentation	D	A&B	D	A&B
Chi square and interpretation of results	E,F	C&D	F	A&B
Correlation Regression	E,F	C&D	F	A&B
Multiple and logistic Regression	E,F	C&D	F	A&B

5. Course Methods of teaching/learning

1. Lectures
2. Assignments
3. Discussions
4. Exercises
5. Tutorial on SPSS v.16

6. Course assessment methods:

i. Assessment tools:

1. Attendance and active participation
2. Assignment
3. Practical SPSS examination
4. Written exam

ii. Time schedule: After 6 months from applying to the M D degree.

iii. Marks: 50 (35 for written exam and 15 for practical exam).

7. List of references

i. Lectures notes

Department lecture notes

ii. Essential books

- Medical Statistics: Book by Ramakrishna HK 2016
- Janet Peacock and Philip Peacock. Oxford Handbook of Medical Statistics (second edition.) Publisher: Oxford University Press, Print Publication Date: Nov 2010 Print ISBN-13: 9780199551286, Published online: Jun 2011. DOI: 10.1093/med/9780199551286.001.0001
- Leslie E. Daly MSc, PhD, Hon MFPHM,, Geoffrey J. Bourke MA, MD, FRCPI, FFPHM, FFPHMI, Interpretation and Uses of Medical Statistics, Fifth Edition, First published:1 January 2000, Print ISBN:9780632047635 |Online ISBN:9780470696750 |DOI:10.1002/9780470696750
- Marcello Pagano, Kimberlee Gauvreau: Principles of Biostatistics second edition published in 2000 by Brooks/Cole and then Cengage Learning. CRC Press, Feb 19, 2018 - Mathematics - 584 pages.

Iii- Recommended books

- Ji-Qian Fang (Sun Yat-Sen University, China) Handbook of Medical Statistics: https://doi.org/10.1142/10259 | September 2017.Pages: 852
- Robert H. Riffenburgh: Statistics in Medicine 4th Edition (2020). Evidence Based Medicine How to practice and teach EBM.
- Discovering Statistics Using IBM SPSS Book by Andy Field, 2013.

iii. Periodicals, Web sites, etc

iv. **Periodicals , etc** Statistics in Medicine - Wiley Online Library

v. **Web sites** https://www.phc.ox.ac.uk/research/medical-statistics

8. Signatures

Course Coordinator: - Farag Mohammed Moftah	**Head of the Department:** - Prof. Eman Morsy Mohamed
Date: 10-1-2022	**Date**: 10-1-2022
Associated Coordinator: Prof. Medhat Araby Khalil Saleh	
Date: 10-1-2022	

Course 2: Research Methodology

Name of department: Public Health and Community Medicine
Faculty of medicine
Assiut University
2021-2022

1. Course data

- **Course Title: Research methodology**
- **Course code: FAC309B**
- **Specialty: Offered to all clinical and academic specialties**
- **Number of credit points: 1 credit point**
- **Department (s) delivering the course: Department of public health**
- **Coordinator (s):**
  - **Course coordinator:** Prof. Mahmoud Attia

  Assistant coordinator (s): Prof. Ekram Mohamed
  - Prof. Medhat Araby Khalil
- **Date last reviewed:** January 2022
- **Requirements (prerequisites) if any:**
  - **Completed Master degree in any of the academic or clinical departments of Medicine.**

2. Course Aims

To provide graduate students with the skills of:

- planning and implementing sound research
- writing a scientific research proposal

3. Intended learning outcomes (ILOs)

A knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Explain differences between different study designs.	Lecture and discussion Practical sessions Workshops	Written exam Log book assignments Practical exam
B. Identify sources and types of bias in research.	Lecture and discussion Practical sessions	Written exam Log book assignments Practical exam
C. Identify methods of data collection.	Lecture and discussion Practical sessions	Written exam Log book assignments
D. Select and design valid measurement tools for research.	Lecture and discussion Practical sessions Workshops	Written exam Log book assignments Practical exam
E. Explain ethical issues in conducting research on human subjects.	Lecture and discussion Practical sessions Workshops	Written exam Log book assignments
F. List the steps involved in proposal writing.	Lecture and discussion Practical sessions Workshops	Written exam Log book assignments Practical exam
G. Identify a research problem within a conceptual framework.	Lecture Discussion	Written exam Log book assignments

		Practical exam
H. Use the web sources to do a literature search	Practical tutorial on web	Log book assignment
I. Describe the rules of authorship in scientific writing.	Lecture and discussion Practical sessions Workshops	Written exam Log book assignments
J. Select the appropriate study design for the research question.	Lecture Practical sessions	Written exam Practical exam
K. Minimize bias in designing research.	Lecture	Written exam
L. Screening & theoretical background	Lectures	Written exam Practical exam
M. Mention the basic ethics for conducting a research and medicolegal principles relevant to data confidentiality.	lectures seminar	Written exam Practical exam

B. intellectual

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A- Apply basic science & knowledge for appraising scientific literature.	Discussions &seminars	Written exam Practical exam
B- Design research and present study data, in seminars.	lecture seminar	log book assignments
C- Design suitable epidemiological study.	lecture seminar	log book assignments
D- Design strategies for resolving ethical concerns in research, law, and regulations.	lecture Workshops	Written exam log book assignments
E- Apply coherently synthesize ideas and integrate lateral and vertical thinking.	lecture Workshops	log book assignments
F- Evaluate screening tests and interpreting their uses in different population.	lecture	Written exam Practical exam

C. Practical skills

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A- Conduct epidemiological studies, screening and surveys.	lectures seminar	written exam log book assignments
B- Identify steps required in fielding the study.	Lecture	Assignments Written exam
C- Managing data collection team.	lectures seminar	log book assignments
D- Identify steps required for calculation sensitivity, specificity, positive predictive value, negative predictive value, accuracy of a screening test.	Lecture Practical sessions	Assignments Written exam Practical exam
E- Be able to define and apply the epidemiologic criteria of causality and be able to distinguish between a measure of association and evidence of causality.	Lecture Practical sessions	Assignments Written exam Practical exam
F- Synthesize information from multiple sources for research writing and the ability to perform paper critique .	Lecture Practical sessions	Assignments Written exam Practical exam
G- Identify bias and confounding in epidemiological study designs, their types and ways to control them in various types of biases.	Lecture Practical sessions	Assignments Written exam Practical exam

D General skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A- Scientific paper and proposal writing skills: be able to write an introduction, objectives and the methodological section.	Tutorial	Written examination
B- Learn authorship ethical rules.	Tutorial	Written examination
C- Perform practice-based improvement activities using a systematic methodology (audit, logbook, critical appraisal)	- Lectures -Practical sessions - Discussion - Readings	critical appraisal
D- Appraise evidence from scientific studies(journal club)	- Lectures -Practical sessions - Discussion - Readings	critical appraisal
E- Conduct epidemiological studies, screening and surveys.	- Lectures -Practical sessions - Discussion - Readings	attendance and participation
F- Facilitate training of junior students and other health care professionals in different screening activities.	Field work Participation in projects	attendance and participation

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
G- Maintain ethically sound relationship with community members.	- Lectures -Practical sessions - Discussion - Readings	Written exams

H- Provide information using effective nonverbal, explanatory, questioning, and writing skills.	- Lectures -Practical sessions - Discussion - Readings	Written exams Practical exams
I- Present results of researches in seminars.	- Lectures -Practical sessions - Discussion - Readings	Log book assignments

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
J- Demonstrate respect, compassion, and integrity to the needs of society.	- Lectures - Discussion - Readings	Written exams
K- Manage potential conflicts of interest encountered by practitioners, researchers, and organizations.	- Lectures - Discussion - Readings	Written exams
L- Design strategies for resolving ethical concerns in research, law, and regulations.	Lectures - Discussion - Readings	Written exams Practical exams
M- Demonstrate ways to control for confounding in the analysis phase of a study	Lectures - Discussion - Readings	Written exams Practical exams
N- Demonstrate a commitment to ethical principles including confidentiality of participants' information and informed consent.	Lectures - Discussion - Readings	Written exams
O- Assess ethical considerations in developing communications and promotional initiatives.	- Lectures - Discussion - Readings	Written exams

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

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skills C	General Skills D
Over view on research conduction and research ethics	A&E	A-D	A-C	C-G, I,L&M-O
How to write a research proposal	F,I	E	F	A-C&H
Observational study design	A& D	B & C	D	E & F
Experimental study design	A& D	B & C	B	E & F
Evaluation of diagnostic tests (Screening)	L	A	B& E	F
Systematic reviews and meta analysis	G, H & M	E& F	F	C, D
Confounding, bias & effect modification	B & K	D	E & G	M

5. Course Methods of teaching/learning:

1. Lectures
2. Assignments
3. Discussion
4. Exercises

6. Course assessment methods:

i. Assessment tools:

1. Attendance and participation
2. Log book assignments
3. Written examination
4. Practical examination

ii. Time schedule: After 6 months from applying to the M D degree.

iii. Marks: 50 (35 for written exam and 15 for practical exam).

7. List of references

i. Lectures notes

- Department lecture notes

ii. Essential books

- Research Design: Qualitative, Quantitative and Mixed Methods Approaches 4th Edition by John W. CreswellSAGE Publications, Inc; 4th edition (January 1, 2014)
- Research methodology: A step – by – step Guide for Beginners. Ranjit Kumar, 2020. Second edition https://books.google.com.eg/books?
- Medical Research Essentials Rania Esteitie, McGraw Hill Professional, third edition, Feb 5, 2014 - Medical - 104 pages
- Research Methodology in the Medical and Biological Sciences Petter Laake, Haakon Breien Benestad, Bjorn R. Reino Olsen, 4th edition , Academic Press, Nov 5, 2007 - Science - 512 pages

iv. Recommended books

- Research Methods in Education 7th Edition, by Louis Cohen, Lawrence Manion, Keith Morrison Publisher: Routledge; (April 22, 2011) www.routledge.com/textbooks/cohen7e.
- Research Methodology: A Practical and Scientific Approach Vinayak Bairagi, Mousami V. Munot · 2019, Research Methodology: A Practical and Scientific Approach - Google Books
- Based Medicine How to practice and teach EBM. David Sachett, Sharon E. Straus, W. Scott Richardson , William Rosenberg R.Brain Haynes
- Dissertation workshop open courseware JHSPH

8. Signatures

Course Coordinator: Prof.Mahmoud Attia	**Head of the Department:** Prof. Eman Morsy Mohamed
Date: 10-1-2022	**Date**: 10-1-2022

Course 3: Medico legal Aspects and Ethics in Medical Practice and Scientific Research

Name of department:
Forensic medicine and clinical toxicology
Faculty of medicine
Assiut University
2016-2017

1. Course data

- **Course Title: Medicolegal Aspects and Ethics in Medical Practice and Scientific Research**
- **Course code: FAC310C**
- **Speciality:General and special surgery (1st part),**
- **Number of credit points: 1 credit point**
- **Department (s) delivering the course: Forensic Medicine and Clinical Toxicology**
- **Coordinator (s):**
- **Course coordinator:**
  Prof. Ghada omran
- **Date last reviewed:** September 2017
- **Requirements (prerequisites) if any :**
  - **Completed Master degree**

2. Course Aims

To describe the basic ethical and medicolegal principles and bylaws relevant to practice in the field of General and special surgery Rheumatology

3. Intended learning outcomes (ILOs):

A. knowledge and understanding

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Mention principals of writing consent forms.	Lecture and discussion	Written & oral exam
B. Mention principals of Writing a death certificate	Lecture and discussion	Written & oral exam
C. Explain principals of medical reports.	Lecture and discussion	Written & oral exam
D. Mention principals of Dealing with wounds.	Lecture and discussion	Written & oral exam
E. Mention principals of firearm injuries.	Lecture and discussion	Written & oral exam
F. List indications of induced emesis, gastric lavage and samples collection.	Lecture and discussion	Written & oral exam

B. Intellectual

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Design and present case , seminars in death certificate	Lecture and discussion	Written & oral exam
B. Design and present case, seminars in toxicological cases	Lecture and discussion	Written & oral exam

C. Practical skills

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Identify medical ethics and ethics in research.	Lecture and discussion	Discussion
B. Prepare and write consent.	Lecture and discussion	Discussion
C. Identify medical responsibilities.	Lecture and discussion	Discussion
D. Write death certificate.	Lecture and discussion	Discussion and active participation
E. Deal with a case of Suspicious death	Lecture and discussion	Discussion and active participation
F. Write medical reports	Lecture and discussion	Discussion and active participation
G. Identify types of wounds and deal with them.	Lecture and discussion	Discussion and active

		participation
H. Identify types, distance and direction of firearm wounds and deal with them	Lecture and discussion	Discussion and active participation
I. Elicit death associated with surgical anesthesia.	Lecture and discussion	Discussion and active participation
J. Perform gastric lavage, induce emesis, and obtain samples	Lecture and discussion	Discussion and active participation

D. General Skills

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Present a case.	Lecture and discussion	Global rating logbook
B. Write a consultation note	Lecture and discussion	Global rating logbook
C. Inform patients and maintaining comprehensive.	Lecture and discussion	Global rating logbook
D. Make timely and legible medical records	Lecture and discussion	Global rating logbook
E. Acquire the teamwork skills	Lecture and discussion	Global rating logbook

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

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skills C	General Skills D
1. Death and death certificate.	B	A	D	
2. Suspicious death	B		E	B
3. Death associated with surgical anesthesia	B		I	B
4. Medical reports	C	B	F	A,D,E
5. Toxicological Reports	F	B	J	A,E
6. Wounds	D		G	B
7. Firearm injuries	E		H	B
8. Ethics in research			A	
9. Medical ethics.	A		A,B,C	C,E

5. Course Methods of teaching/learning:

1. Lectures.
2. Discussions.
3. Exercises.

6. Course assessment methods:

i. Assessment tools:

1. Written examination.
2. Attendance and active participation.
3. Oral examination.

ii. Time schedule: After 6 months from applying to the M D degree.

iii. Marks: 50 (35for written exam and 15 for oral exam).

7. List of references

i. Lectures notes

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

ii. Essential books

- Bernard Knight and Pekka Saukko (2015: Knight Forensic Pathology. Hodder Arnold press
- Goldfrank, Lewis R.; Howland, Mary Ann; Hoffman, Robert S.; Nelson, Ewis S.; Lewin, Neal A (2019): Goldfrank's Toxicologic Emergencies, 11th ed. McGraw Hill / Medical.
- Medical Ethics Manual. World medical association. Third edition 2015.
- Medical ethics and law. Dominic Wilkinson, 3rdedition 2019.

iii. Recommended books

- Biswas Gautam (2021): Review of Forensic Medicine & Toxicology. 5th ed. Jaypee Brothers Medical Pub.

iv. Journal and web site

- Journals of all Egyptian Universities of Forensic Medicine and Clinical Toxicology.
- All International Journals of Forensic Medicine and Clinical Toxicology which available in the university network at www.sciencedirect.com. As :
  - Forensic Science International Journal.
  - Toxicology Letter.

v. others

8. Signatures

- Course Coordinator: **Prof.** Prof. Ghada omran	**- Head of the Department:** **Prof.** Randa Hussein Abdelhady
Date: September 2017	**Date:** September 2017

Course 4 Surgical Anatomy

- **Course Title: Surgical Anatomy**
- **Course code: SUR 311A**
- **Speciality** General surgery
- **Number of Credit point :- Didactic 3.5 (100%)hours - practical 0 (0%)hours, total (3.5)**
- **Department (s) delivering the course :** General surgery **department**
- **Coordinator (s):**

- Staff member of General Surgery by rotation.

Date last reviewed: 9- 2022

- **Requirements (prerequisites) if any : None**

2. Course Aims

The student should acquire the facts of Surgical Anatomy 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	*Methods of Evaluation*
A. Describe anatomical Principles of - Embryology of - The development of the face, lips and palate. - Branchial arches. - Thyroid and parathyroid. - Congenital anatomy of Breast. - Digestive System. - Head neck anatomy - Thyroid - The surface anatomy of the neck, - The fascial 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,	-Lectures tutorial	-Written and oral examination - Log book

- 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, - 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 congenital abnormalities, - The gastrointestinal adnexae: liver, gall-bladder and its ducts, pancreas and spleen, - The liver, - The biliary system, - The gall-bladder, - The pancreas, - The spleen The Thorax – Surface markings of the more important thoracic contents, – The thoracic cage, – The lungs, – The mediastinum, –The thoracic duct,		
B. Describe antomical details of the following: - Head and Neck - Thoracic Wall and Pleurae - Breast - Mediastinum - Pericardium, Heart, and Great Vessels in the Thorax - Diaphragm - Abdominal Wall and Hernias - Peritoneum, Omenta, and Internal Hernias - Retroperitoneum		

- Great Vessels in the Abdomen - Esophagus - Stomach - Small Intestine - Appendix - Large Intestine and Anorectum - Liver - Extrahepatic Biliary Tract and Gallbladder - Pancreas - Spleen - Lymphatic System.		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of Physiology with clinical reasoning, diagnosis and management of common diseases related to General Surgery**.**	-Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to General Surgery**.**		

C- Practical skills

Practical: 0 hours

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	seminars Senior Staff Experience	Oral exam Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write reports in common conditions mentioned in A .A and A.B	CLINICAL ROUNDS SEMINARS	Logbook Oral exam Chick list

Professionalism

ILOs	Methods of teaching/ Learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles		Logbook Oral exam

Systems-Based Practice

ILOs	Methods of teaching learning	Methods of Evaluation
D. Work effectively in different health care delivery settings and systems.	Senior Staff Experience	1. 360o global rating

4. contents (topic s/modules/rotation

Time Schedule: One year after application to MD degree

Topic	Covered ILOs			
	Knowledge	**Intellectual**	**Practical skill**	**General Skills**
Embryology of				
- The development of the face, lips and palate.	A	A,B	-	A-D
- Branchial arches.	A	A,B	-	A-D
- Thyroid and parathyroid.	A	A,B	-	A-D
- Congenital anatomy of Breast.	A	A,B	-	A-D
- Digestive System.	A	A,B	-	A-E
Head neck anatomy				
- Thyroid		-	-	-
- The surface anatomy of the neck,	A	A,B	-	A-D
- The fascial compartments of the neck,	A	A,B	-	A-D
- The thyroid gland,	A	A,B	-	A-D
- The parathyroid glands,				
- The palate,	A	A,B	-	A-D
- The tongue and floor of the mouth,	A	A,B	-	A-D
- The tongue,	A	A,B	-	A-D
- The floor of the mouth				A-D
- The salivary glands,	A	A,B	-	A-D
- The parotid gland,	A	A,B	-	
- The submandibular	A	A,B	-	A-D

gland,				
- The sublingual gland,	A	A,B	-	A-D
- The major arteries of the head and neck,	A	A,B	-	A-D
- The common carotid arteries,	B	A,B	-	A-D
- The external carotid artery,	B	A,B	-	
- The internal carotid artery,	B	A,B	-	A-D
- The subclavian arteries,	B	A,B	-	A-D
- The veins of the head and neck,	B	A,B	-	A-D
- The internal jugular vein,	B	A,B	-	A-D
- The subclavian vein,	B	A,B	-	
- The lymph nodes of the neck,	B	A,B	-	A-D
- The cervical sympathetic trunk,	B	A,B	-	A-D
- The branchial system and its derivatives,	B	A,B	-	A-D
- Branchial cyst and fistula,	B	A,B	-	A-D
- The surface anatomy and surface markings of the head,	A	A,B	-	
- The scalp	B	A,B	-	A-D
- The mandible and				A-D
- The temporomandibular joint.	A	A,B	-	A-D
The Abdomen and Pelvis				
- Surface anatomy and	A	A,B	-	

surface markings,				
- Vertebral levels,	A	A,B	-	A-D
- Surface markings,	A	A,B	-	A-D
- The fasciae and muscles of the abdominal wall,	A	A,B	-	A-D
- Fasciae of the abdominal wall,	A	A,B	-	A-D
- The muscles of the anterior abdominal wall,	A	A,B	-	
- The anatomy of abdominal incisions,	A	A,B	-	A-D
- The inguinal canal,	A	A,B	-	A-D
- Peritoneal cavity,	A	A,B	-	A-D
- Intraperitoneal fossae,	A	A,B	-	A-D
- The subphrenic spaces,	A	A,B	-	
- The gastrointestinal tract,	A	A,B	-	A-D
- The Oesophagus,	A	A,B	-	A-D
- The stomach, The duodenum,	A	A,B	-	A-D
- Small intestine,	A	A,B	-	A-D
- Large intestine,	A	A,B	-	
- The appendix,	A	A,B	-	A-D
- The rectum,	A	A,B	-	A-D
- Arterial supply of the intestine,	A	A,B	-	A-D
- The portal system of veins,	A	A,B	-	A-D
- Lymph drainage of the intestine,	A	A,B	-	
- The structure of the alimentary canal,	A	A,B	-	A-D
- The development of the	A	A,B	-	A-D

intestine and its congenital abnormalities,				
- The gastrointestinal adnexae: liver, gall-bladder and its ducts, pancreas and spleen,	A	A,B	-	A-D
- The gastrointestinal adnexae: liver, gall-bladder and its ducts, pancreas and spleen,	A	A,B	-	A-D
- The liver,	A	A,B	-	
- The biliary system,	A	A,B	-	A-D
- The gall-bladder,	A	A,B	-	A-D
- The pancreas,	A	A,B	-	A-D
- The spleen	A	A,B	-	A-D
The Thorax				
– Surface markings of the more important thoracic contents,	A	A,B	-	A-D
– The thoracic cage,	A	A,B	-	A-D
– The lungs,	A	A,B	-	A-D
– The mediastinum,	A	A,B	-	A-D
– The thoracic duct,	A	A,B	-	A-E

5. Course Methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. journal club,

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:

- Written
- Oral examination
- Chick list
- log book & portfolio

iii. Marks: 175 marks

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies
- Principles of General Surgery Book by Staff Members of the Department of General Surgery-Assiut University

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

- Sabiston Textbook of Surgery: The Biological Basis of Modern Surgical Practice 20th Edition
- Schwartz. SCHWARTZ'S PRINCIPLES OF SURGERY 2-volume set 11th edition 11th Edition, 2019

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

iv. Periodicals, Web sites, … etc

- **Periodicals**
  - American Journal of General Surgery
  - BSJ
  - European Journal of General Surgery
  - Egyptian Journal of General Surgery
  - American journal of Anatomy.
  - Journal of applied Anatomy.
  - Human pathology
  - Histopathology
  - American Journal of surgical pathology
- **Web Sites**:
  - European Society of Surgery , www.Essurg.org,
  - www.Americanjournalofsurgery.com,
  - : http://www.ncbi.nlm.nih.gov/pubmed.
  -

v. Others None

9. Signatures

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

Course 5 Surgical Pathology

- **Course Title: Surgical Pathology**
- **Course code: SUR 311B**
- **Speciality** General surgery
- **Number of Credit point :- Didactic 3.5(100%)hours - practical 0 (0%)hours, total (3.5)**
- **Department (s) delivering the course :** General surgery **department**
- **Coordinator (s):**
  - **Course coordinator:**

    Staff Members of General Surgery by Rotation
- **Date last reviewed: 9/ 2022**
- **Requirements (prerequisites) if any : None**

2. Course Aims

The student should acquire the facts of Surgical Pathology 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	*Methods of Evaluation*
A. Outline the Principles of General Pathology - 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. Describe Physiologic details of: - GIT Pathology. - The Liver, Gallbladder, and Biliary 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
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to General Surgery.		

C-Practical skills

Practical: 0 hours

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	seminars Senior Staff Experience	Oral exam Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write reports in common conditions mentioned in A .A and A.B	CLINICAL ROUNDS SEMINARS	Logbook Oral exam Chick list

Professionalism

ILOs	Methods of teaching/ Learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles		Logbook Oral exam

Systems-Based Practice

ILOs	Methods of teaching learning	Methods of Evaluation
D. Work effectively in different health care delivery settings and systems.	Senior Staff Experience	1. 360o global rating

4. contents (topic s/modules/rotation
Matrix Course (Unit 2)

Time Schedule: One year after application to MD degree

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

5. Course Methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. journal club,

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:

- Written
- Oral examination
- Chick list
- log book & portfolio

iii. Marks: 175 marks

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies
- Principles of General Surgery Book by Staff Members of the Department of General Surgery-Assiut University

ii. Essential books

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

- Sabiston Textbook of Surgery: The Biological Basis of Modern Surgical Practice 20th Edition
- Schwartz. SCHWARTZ'S PRINCIPLES OF SURGERY 2-volume set 11th edition 11th Edition, 2019
- Rosai and Ackerman's Surgical Pathology Juan Rosai, Mosby 2004
- Sternberg's Diagnostic surgical Pathology 4th edition, 2004

iv. Periodicals, Web sites, … etc

- **Periodicals**
  - American Journal of General Surgery
  - BSJ
  - European Journal of General Surgery
  - Egyptian Journal of General Surgery
  - American journal of Anatomy.
  - Journal of applied Anatomy.
  - Human pathology
  - Histopathology
  - American Journal of surgical pathology

- **Web Sites**:
    - European Society of Surgery , www.Essurg.org,
    - www.Americanjournalofsurgery.com,
    - : http://www.ncbi.nlm.nih.gov/pubmed.
    -

v. Others None

9. Signatures

Course Coordinator:	**Head of the Department:**
Date: 9/2022	**Date: 9/2022**

Second Part

Course 6: General Surgery

Name of department: of General Surgery
Faculty of medicine
Assiut University
2022-2023

1. Course data

- **Course Title:** General Surgery
- **Course code: SUR311C**
- **Speciality** General Surgery
- **Number of Credit points: Number of Credit point : 24 (16.3%) practical 123 (83.7%).total 147**
- **Department (s) delivering the course:** Department of General Surgery- Faculty of Medicine- Assiut- EGYPT
- **Coordinator (s):**

Principle coordinator: Prof. Samir Ammar
Prof. Mohamed korni

- **Date last reviewed: July 2022**
- **Requirements (prerequisites) if any :**
  - None
- **Requirements from the students to achieve course ILOs are clarified in the joining log book.**
- **This course consists of 5 Units(Modules)**
  - **1- Unit (Module) 1 Principles in General Surgery.**
  - **2- Unit (Module) 2 GIT Surgery**
  - **3- Unit (Module) 3 Breast and Endocrine Surgery**
  - **4- Unit (Module) 4 Maxillofacial and neck Surgery**
  - **5- Unit (Module) 5 Abdominal wall, Hernias, Testis and Scrotal Surgery.**

2. Course Aims

2/1 -To enable MD students to master high level of clinical skills, in addition to update and advanced medical knowledge, integration and interpretation of different investigations, professional competence in the area of Principles in General Surgery, GIT, Breast and Endocrine , Maxillofacial and neck and Abdominal wall ,Hernias , Testis and Scrotal Surgery related disorders.

2/2 -To provide candidates with enough general skills related to General Surgery including, writing specialized medical reports, use of information technology in clinical decisions and research, teaching junior students and counseling patients and their families about General Surgical diseases and conditions.

2/3- The student should acquire the anatomical and pathological background necessary for General Surgery in clinical reasoning, diagnosis and management of General Surgery diseases.

3. Course intended learning outcomes (ILOs):

Unit 1 (Module) Principles in General Surgery.

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Explain update and evidence based etiology, clinical picture, diagnosis and management of the following common diseases and clinical conditions: 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 21. Indication, technical consideration, complications and results of renal, hepatic pancreatic cardiac and bone marrow transplantation 22. Terminal care in surgical patient	-Didactic (lectures, seminars, tutorial) -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 -Written and oral examination

B. Demonstrate the following • Anatomic details of the following: * Layers of skin. • Physiologic Principles& details of the following: ○ Autonomic nervous system ○ Blood ○ Regulation of body temperature ○ Circulation • Pharmacological Principles of: ○ General pharmacology ○ Pharmacological details of ❖ Antibiotics ❖ Antiseptics ❖ Antiparasitic Chemotherapy ❖ TB chemotherapy ❖ Cancer chemotherapy ❖ Corticosteroids ❖ Antiviral.	-Didactic (lectures, seminars, tutorial) -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 -Written and oral examination
• Principles &details of General Pathology of: - Wound healing - disturbance of circulation - Shock - Immunity & hypersensitivity - Bacterial infection - Tuberculosis. - Disturbance of growth - Pathology of tumors. Principles&/ details of microbiology of general bacteriology Bacterial structure, growth and metabolism Bacterial genetics Antimicrobial agents Pathogenicity of microorganism Diagnostic microbiology Immunology Basic immunology Immunologic diagnostic test and serology Hypersensitivity	-Didactic (lectures, seminars, tutorial) -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 -Written and oral examination.

Tumor immunology Immunogenetics and transplantation immunology <u>General virology</u> Pathogenesis of viral diseases Interferon and antiviral agents <u>Microorganism encountered in</u> - Surgical infection		
C. Describe the basics of quality assurance to ensure good clinical care in General Surgery		
D. Explain the ethical and scientific principles of medical research.		
E. Explain the impact of common health problems in the field of principle General Surgery on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Design and present case in common problem related to principle General Surgery.	-Clinical rounds -Senior staff experience	-Procedure and case presentation -Log book & Portfolio
B. Apply the basic and clinically supportive sciences which are appropriate to principle General Surgery related problems.		
C. Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to principle General Surgery.		
D. Plan research projects.		
E. Write scientific papers.		
F. Participate in clinical risk management of clinical governance.		
G. Plan quality improvement activities in the field of medical education and clinical practice in to principle General Surgery.		
H. Create and innovate plans, systems, and other issues for improvement of performance in to principle General Surgery		
I. Present and defend his / her data in front of a panel of experts		
J. Formulate management plans and alternative decisions in different situations in the field of principle General Surgery		

C-Practical skills (Patient Care)

ILOs	Methods of teachinhg/ learning	Methods of Evaluation
A. Take history, examine and clinically diagnose different conditions related to principle of General Surgery.	-Didactic (lectures, seminars, tutorial) -Clinical rounds 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 -Clinical exam
B. Order the following non invasive and invasive diagnostic procedures • 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,	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list

release and aggregation) . • Prothrombin time. • Partial thromboplastine time. • Thrombin time. • CVP. • PA WP. • ECG. • Temperature. • Bacteriological studies of wound discharge. • Culture and sensitivity. • Tuberculin skin test. • ESR. • Biopsy. • Serum albumen.		
C. <u>Interpret the following non invasive and invasive diagnostic procedures</u> • 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.	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list

• PA WP. • ECG. • Temperature. • Bacteriological studies of wound discharge. • Culture and sensitivity. • Tuberculin skin test. • ESR. • Biopsy. • Serum albumen.		
D. <u>Perform the following non invasive and invasive diagnostic procedures</u> • Abdominal sonar. • Peritoneal lavage and aspiration. • Biopsy	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
E. <u>Prescribe the following non invasive and invasive therapeutic procedures.</u> • Abdominal sonar. • CT abdomen. • Peritoneal lavage and aspiration. • Bone marrow aspiration and biopsy. • CVP. • Bacteriological studies of wound discharge. • Culture and sensitivity. • Biopsy	-Observation -Post graduate teaching -Hand on workshops	- Procedure presentation - Log book - Chick list

F. <u>Perform the following non invasive and invasive therapeutic procedures</u> • Peritoneal lavage and aspiration.	-Observation -Post graduate teaching -Hand on workshops	- Procedure presentation - Log book - Chick list
G. <u>Develop and carry out patient management plans for the following problems</u> 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 21. Indication, technical consideration, complications and results of renal, hepatic pancreatic cardiac and bone marrow transplantation	-Clinical round with senior staff	

22. Terminal care in surgical patient.		
H. Lead health care professionals, including those from other disciplines, to provide patient-focused care in Principles in General Surgery related conditions.	-Clinical round with senior staff	
I. Use information technology to support patient care decisions and patient education for the principles of General Surgery related conditions.	-Clinical round with senior staff	
J. Provide health care services aimed at preventing the Principles in General Surgery related health problems.	-Clinical round with senior staff	
K. Work with health care professionals, including those from other disciplines, to provide patient-focused care for the mentioned in A.A and A.C	-Clinical round with senior staff	
L. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible medical records)	Clinical round with senior staff	

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 the common problems (plain and conduct audit cycles) in conditions mentioned in A.A and A.C	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	- Global rating -Procedure & case presentation -Log book & Portfolios - Chick list
B. Locate, appraises, and assimilates evidence from scientific studies related to patients' health problems.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	- Global rating -Procedure & case presentation -Log book & Portfolios - Chick list
C.Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness		
D. Use information technology to manage information, access on-line medical information; and support their own education		
E. Lead the learning of students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Create and sustain a 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
G. Perform the following oral communications: a. Interpretation of the results of different investigations related to Principles of General Surgery and discussion of different therapeutic options	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	- Global rating -Procedure & case presentation -Log book & Portfolios - Chick list
H. Fill the following reports: • Patients' medical reports • Death report • Abdominal ultrasonography reports • X ray reports		
I. Work effectively with others as a member or leader of a health care team as regard diagnosis and treatment of conditions mentioned in A.A and A.C		

Professionalism

ILOs	Methods of teaching/ Learning	Methods of Evaluation
J. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest.	- Observation - Senior staff experience - Case taking	-Objective structured clinical examination - Patient survey
K. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.		- 360o global rating
L. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Work effectively in different health care delivery settings and systems.	Observation -Senior staff experience	- 360o global rating
N. Practice cost-effective health care and resource allocation that does not compromise quality of care		- Check list evaluation of live or recorded performance
O. Advocate for quality patient care and assist patients in dealing with system complexities		- 360o global rating - Patient survey
P. Partner with health care managers and health care providers to assess, coordinate, and improve health care and predict how these activities can affect system performance		

Unit 2 (Module)) 2 GIT Surgery

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Explain update and evidence based etiology, clinical picture, diagnosis and management of the following common diseases and clinical conditions: **Section 1: Esophagus:** 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 **Section 2: stomach and duodenum** 1. Congenital hypertrophic pyloric stenosis 2. Acute gastric dilatation 3. Peptic ulcer 4. Complication f gastric operations 5. Neoplasms of the stomach 6. Gastrectomy **Section 3 : liver** 1. Liver trauma 2. Infection of the liver 3. Portal hypertension 4. Liver tumors **Section 4 : Biliary System:** 1. Congenital anomalies of gall bladder and bile duct 2. Gall stones 3. Stricture of the biliary tract 4. Carcinoma of the gall bladder	-Didactic (lectures, seminars, tutorial) -Outpatient -Inpatient -Case presentation -Direct observation	- log book -Objective structure clinical examination (OSCE) One MCQ examination at the second half of the second year -Written and oral exam

5. Jaundice **Section 5 : Pancrease** 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. splenictomy **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 **Section 9 : Vermiform Appendix** 1. Appendicitis		

2. Neoplasm of the appendix **Section 10 : Anal Canal** 1. Pilonidal sinus 2. Anal fissure 3. Hemorrhoids 4. Anorectal abscess 5. anal fistula 6. fecal incontinence 7. anal canal and anal verge tumors **Section 11 : Review Subject** 1. abdominal tumors in children 2. haematemesis 3. Bleeding/rectum		
B. Illustrate the principle detailed of surgical &anatomy & pathology of condition related to AA circumstances Esophagus Stomach and duodenum Liver Biliary system Pancrease Spleen Small and Large intestine Anal Canal	-Didactic (lectures, seminars, tutorial) -outpatient -inpatient -case presentation -Direct observation	- log book -Objective structure clinical examination (OSCE) One MCQ examination at the second half of the second year -Written and oral exam
C. Outline basics of the following rare diseases and conditions including: **-Physiologic Principles& details of** Esophagus Stomach and duodenum Liver Biliary system Pancrease Spleen	-Didactic (lectures, seminars, tutorial) -Clinical rounds -Seminars -Clinical rotations	-OSCE at the end of each year -log book & portfolio - One MCQ examination at the second half

Small and Large intestine Anal Canal	-Service teaching	of the second year and another one in the third year -Written and oral examination
D. Explain the ethical and scientific principles of medical research.		
E. Describe the basic ethical and medicolegal principles revenant to the GIT Surgery .		
F. Describe the basics of quality assurance to ensure good clinical care in to the GIT Surgery .		
G. Explain the ethical and scientific principles of medical research		
H. Explain the impact of common health problems in the field of GIT Surgery on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Design and present case in common problem related to GIT Surgery.	-Clinical rounds -Senior staff experience	-Procedure and case presentation -Log book & Portfolio
B. Apply the basic and clinically supportive sciences which are appropriate to the GIT Surgery related problems.		
C. Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to GIT Surgery.		

D. Plan research projects.		
E. Write scientific papers.		
F. Lead risk management activities as a part of clinical governs. • Peritonitis • Common bile duct injuries • Recurrent goiter • Mesenteric vascular occlusion • Mortality		
G. Plain quality improvement activities in the field of medical education and clinical practice in GIT Surgery.		
H. Create and innovate plans, systems, and other issues for improvement of performance in GIT Surgery.		
I. Present and defend his / her data in front of a panel of experts		
J. Formulate management plans and alternative decisions in different situations in the field of GIT Surgery.		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Take history, examine and clinically diagnose different conditions related to GIT Surgery	Lecture - Seminar - Outpatient -Inpatient -Case presentation -Direct observation	-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 -Clinical exam
B. <u>Order the following non invasive and invasive diagnostic procedures</u> - 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 - Mesenteric angiography	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
C. <u>Interpret the following non invasive and invasive diagnostic procedures</u> • 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	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list

• Mesenteric angiography		
D. Perform the following non invasive/invasive diagnostic procedures - Abdominal sonar - Cholangiography	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
E. 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	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Use information technology to support patient care decisions and patient education for the above mentioned conditions	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on	- Procedure presentation - Log book - Chick list

	workshops -Perform under supervision of senior staff	
G. Develop patient management plans for the mentioned problems	-Clinical round with senior staff	
H. Counsel and educate patients and their family about • Symptoms of critical illness • Methods of management	-Clinical round with senior staff	
I. Use information technology to support patient care decisions and patient education for the GIT surgery related conditions.	-Clinical round with senior staff	
J. Provide health care services aimed at preventing the mentioned conditions	-Clinical round with senior staff	
K. 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	-Clinical round with senior staff	
L. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible medical records)		

General skills AS mentioned in unit 1

Unit 3 (Module) Breast and Endocrine Surgery

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Explain update and evidence based etiology, clinical picture, diagnosis and management of the following common diseases and clinical conditions: 1-Developmental abnormalities of thyroglossal duct 2- Goiter 3- Hyperparathyroidism 4- Hypoparathyroidism 5. Adrenal tumors 6- Congenital anomalies of the breast 7- Inflammation of the breast 8- Fibrocystic diseases of the breast 9- Cyst of the breast 10- Nipple discharge 11- Breast neoplasm 12- Diseases of male Breast	- Didactic (lectures, seminars, tutorial) -Outpatient -Inpatient - Case presentation -Direct observation	- Log book - Objective structure clinical examination (OSCE) - One MCQ examination at the second half of the second year -Written and oral exam
B. Illustrate Anatomic, pathologic Principles& details of the following: Anatomy of the thyroid gland Anatomy of parathyroid gland Anatomy of adrenal gland Anatomy of breast- Pharmacological details& Microbiology of conditions related to AA	-Didactic (lectures, seminars, tutorial) -outpatient -inpatient -case presentation -Direct observation	- Log book -Objective structure clinical examination (OSCE) One MCQ examination at the second half of the

		second year -Written and oral exam
C. Outline the Principles& details related to clinical epidemiology of endocrine gland and breast.		
D. Know and apply the basic and clinically supportive sciences which are appropriate to the conditions mentioned above.		
E. Explain the ethical and scientific principles of medical research.		
F. Explain the impact of common health problems in the field of breast and endocrinal surgery on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Design and present case in common problem related to Breast and Endocrinal Surgery.	-Clinical rounds -Senior staff experience	-Procedure and case presentation -Log book & Portfolio
B. Apply the basic and clinically supportive sciences which are appropriate to the Breast and Endocrinal Surgery related problems.		
C. Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to Breast and Endocrinal Surgery.		
D. Plan research projects.		
E. Write scientific papers.		
F. Lead risk management activities as a part of		

clinical governs. Breast and Endocrinal Surgery		
G. Plain quality improvement activities in the field of medical education and clinical practice in Breast and Endocrinal Surgery.		
H. Create and innovate plans, systems, and other issues for improvement of performance in Breast and Endocrinal Surgery.	-Clinical rounds -Senior staff experience	-Procedure and case presentation -Log book & Portfolio
I. Present and defend his data in front of a panel of experts		
J. Formulate management plans and alternative decisions in different situations in the field of Breast and Endocrinal Surgery.		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Take history, examine and clinically diagnose different conditions related to Breast and Endocrinal Surgery.	-Didactic (lectures, seminars, tutorial) - Outpatient -Inpatient -Case presentation -Direct observation	-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 -Clinical exam

B.Order the following non invasive and invasive diagnostic procedures • 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	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list - Objective structure clinical examination (OSCE) - One MCQ examination at the second half of the second year
C.Interpret the following non invasive and invasive diagnostic procedures • 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	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list - Objective structure clinical examination (OSCE) - One MCQ examination at the second half of the second year
D.Perform the following non invasive and invasive diagnostic procedures • Fine needle Aspiration • Tru – cut biopsy	-Clinical round with senior staff -Observation -Post graduate teaching	- Procedure presentation - Log book - Chick list - Objective structure clinical

	-Hand on workshops -Perform under supervision of senior staff	examination (OSCE) - One MCQ examination at the second half of the second year
E. Develop and carry out patient management plans for the following problems: Differential Diagnosis of Solitary Thyroid nodule Diagnosis of hyperparathyroidism Surgical hypertension Early detection of breast cancer	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Counsel and educate patients and their family about some disease which should be detected early like cretinism and cancer breast		
G. Provide health care services aimed at preventing the following conditions: - Cretinism - Pathological from hyperparathyroidism - Complication of surgical - Hypertension	-Clinical round with senior staff	
H. Work with health care professionals, including those from other disciplines, to provide patient-focused care	-Clinical round with senior staff	
I. Use information technology to support	-Clinical round with	

patient care decisions and patient education for the Breast and Endocrinal Surgery related conditions.	senior staff	
J. Provide health care services aimed at preventing conditions	-Clinical round with senior staff	
K. Work with health care professionals, including those from other disciplines, to provide patient-focused care for the following	-Clinical round with senior staff	
L. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible medical records)		

D- General skills

As mentioned in unit 1

Unit (Module) 4 Maxillofacial and Neck surgery

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Explain update and evidence based etiology, clinical picture, diagnosis and management of the following common diseases and clinical conditions: 1- 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	-Didactic (lectures, seminars, tutorial) -Outpatient -Inpatient -Case presentation -Direct observation	- Log book - Objective structure clinical examination (OSCE) - One MCQ examination at the second half of the second year -Written and oral exam
B. Demonstrate -Anatomic Principles& details of Face and neck	-Didactic (lectures, seminars, tutorial) -Outpatient -Inpatient -Case presentation -Direct observation	- Log book -Objective structure clinical examination (OSCE) One MCQ examination at the second half of the second year -Written and oral exam
C. Outline the Physiologic Principles &details of : - Deglutition - salivary gland		

D. Demonstrate the principles of Pharmacologic treatment of conditions mentioned in AA		
E. Demonstrate the Principles& details of Pathophysiology related to : - Diseases of Maxillofacial and neck.		
F. Demonstrate the Principles &details of clinical epidemiology of Diseases of Maxillofacial an neck		
G. Know and apply the basic and clinically supportive sciences which are appropriate to the conditions mentioned		
H. Explain the ethical and scientific principles of medical research.		
I. Explain the impact of common health problems in the field of Maxillofacial and Neck surgery on the society.		

B-Intellectual outcomes

ILOs	**Methods of teaching/ learning**	**Methods of Evaluation**
A. Design and present case in common problem related to Maxillofacial and Neck surgery	-Clinical rounds -Senior staff experience	-Procedure and case presentation -Log book & Portfolio
B. Apply the basic and clinically supportive sciences which are appropriate to the Maxillofacial and Neck surgery		
C. Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to Maxillofacial and Neck surgery		
D. Plan research projects.		
E. Write scientific papers.		
F. Lead risk management activities as a part of clinical governs.		

Maxillofacial and Neck surgery		
G. Plan quality improvement activities in the field of medical education and clinical practice in Maxillofacial and Neck surgery.		
H. Create and innovate plans, systems, and other issues for improvement of performance in Maxillofacial and Neck surgery		
I. Present and defend his / her data in front of a panel of experts		
J. Formulate management plans and alternative decisions in different situations in the field of Maxillofacial and Neck surgery.		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Take history, examine and clinically diagnose different conditions related to Maxillofacial and Neck surgery	-Didactic (lectures, seminars, tutorial) - Outpatient -Inpatient -Case presentation -Direct observation	-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 -Clinical exam
B. Order the following non invasive and invasive diagnostic procedures	-Lecture - Seminar	- Procedure presentation

• X-ray • CT scan head and neck • Sialography • Tru- Cut needle biopsy	-Outpatient -Inpatient -Case presentation -Direct observation	- Log book - Chick list - Objective structure clinical examination (OSCE) - One MCQ examination at the second half of the second year
C. <u>Interpret the following non invasive and invasive diagnostic procedures</u> • X-ray • CT scan head and neck • Sialography • True- Cut needle biopsy	-Didactic (lectures, seminars, tutorial) -outpatient -inpatient -case presentation -Direct observation	- Procedure presentation - Log book - Chick list - Objective structure clinical examination (OSCE) - One MCQ examination at the second half of the second year
D. Develop and carry out patient management plans for the following problems: - Surgical correction of cleft lip and palate -Fixation of bones in maxillofacial injuries - Surgical excision of tumor of tongue - Condylectomy - Parotidectomy -Submandibular sialadenectomy	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops	- Procedure presentation - Log book - Chick list - Objective structure clinical examination (OSCE)

	-Perform under supervision of senior staff	- One MCQ examination at the second half of the second year
E. Counsel and educate patients and their family about Care of the eye of Radical treatment of Parotid	-Didactic (lectures, seminars, tutorial) -Outpatient -Inpatient -Case presentation -Direct observation	- Procedure presentation - Log book - Chick list
F. Provide health care services aimed at preventing the following conditions: Complication and disfigurement after surgery		
G. Work with health care professionals, including those from other disciplines, to provide patient-focused care	-Clinical round with senior staff	
H. Develop and carry out patient management plans for problems	-Clinical round with senior staff	
I. Use information technology to support patient care decisions and patient education for the Maxillofacial and Neck surgery related conditions. • Design internet homepages and follow up patients for smoking cessation and fighting air pollution.	-Clinical round with senior staff	
J. Provide health care services aimed at preventing conditions	-Clinical round with senior staff	

K. Work with health care professionals, including those from other disciplines, to provide patient-focused care for the following • Nutrition and end of life care	-Clinical round with senior staff	
L. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible medical records)		

D- General skills as mentioned in unit 1

Unit (Module) 5 Abdominal Wall, Hernias, Testis and Scrotal Surgery

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
B. Explain update and evidence based etiology, clinical picture, diagnosis and management of the following common diseases and clinical conditions: - Abdominal incision - Disease of abdominal wall - 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	-Didactic (lectures, seminars, tutorial) -Outpatient -Inpatient -Case presentation -Direct observation	- Log book - Objective structure clinical examination (OSCE) - One MCQ examination at the second half of the second year -Written and oral exam
B. Demonstrate Anatomic Principles& details of the following: - Inguinal Canal - Abdominal wall scrotum. - Physiologic Principles &details of Testis and scrotum. - Human Chorionic Gonadotrophins. - Principles& details of pathology of Diseases mentioned A.A. - Principles& details epidemiology of	-Didactic (lectures, seminars, tutorial) -Outpatient -Inpatient -Case presentation -Direct	- Log book -Objective structure clinical examination (OSCE) One MCQ examination at the

Diseases mentioned in A.A. - Pharmacological Principles& details of A.A.	observation	second half of the second year -Written and oral exam
C - Mention the basics and clinically supportive sciences which are appropriate to the rare diseases related to topics mentioned in A.A.		
D-Explain the ethical and scientific principles of medical research.		
I. Explain the impact of common health problems in the field of Abdominal Wall, Hernias, Testis and Scrotal disorders on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Design and present case in common problem related to Abdominal Wall, Hernias, Testis and Scrotal disorders.	-Clinical rounds -Senior staff experience	-Procedure and case presentation -Log book & Portfolio
B. Apply the basic and clinically supportive sciences which are appropriate to the Abdominal Wall, Hernias, Testis and Scrotal disorders related problems.		
C. Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to Abdominal Wall, Hernias, Testis and Scrotal disorders.		
D. Plan research projects.		
E. Write scientific papers.		
F. Lead risk management activities as a part of clinical governs. Abdominal Wall, Hernias, Testis and Scrotal disorders		
G. Plain quality improvement activities in the field of medical education and clinical		

practice in Abdominal Wall, Hernias, Testis and Scrotal disorders.		
H. Create and innovate plans, systems, and other issues for improvement of performance in Abdominal Wall, Hernias, Testis and Scrotal disorders.		
I. Present and defend his data in front of a panel of experts		
J. Formulate management plans and alternative decisions in different situations in the field of Abdominal Wall, Hernias, Testis and Scrotal disorders.		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Take history, examine and clinically diagnose different conditions related to Abdominal Wall, Hernias, Testis and Scrotal disorders.	-Didactic (lectures, seminars, tutorial) - Outpatient -Inpatient -Case presentation -Direct observation	-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 -Clinical exam
B. Order & interpret the following non invasive/invasive diagnostic procedures Order/ interpret -Scrotal sonar -Doppler sonar.	- Clinical rounds Senior staff experience	- Procedure presentation - Log book - Chick list - Objective structure clinical

		examination (OSCE) - One MCQ examination at the second half of the second year
C. Prescribe &perform the following non invasive& invasive therapeutic procedures: • Prescribe drug therapy. • Aspiration from the Scrotum • Perform Reversibility test	- Clinical rounds Senior staff experience	
D. Develop and carry out patient management plans for the following problems mentioned	-Clinical rounds Senior staff experience	
E. Counsel and educate patients and their family y about problems mentioned	- Clinical rounds Senior staff experience	- Procedure presentation - Log book - Chick list
F. Provide health care services aimed at preventing the infectious diseases of the testis	- Clinical rounds Senior staff experience	
G. Work with health care professionals, including those from other disciplines, to provide patient-focused care for the following: -Cardiac diseases -Pre operative assessments -Rehabilitation	-Clinical round with senior staff	
H. Use information technology to support patient care decisions and patient education for the above mentioned	-Clinical round with senior staff	
I. Use information technology to support patient care decisions and patient education for the Abdominal Wall, Hernias, and Testis and Scrotal disorders related conditions.	-Clinical round with senior staff	

J. Provide health care services aimed at preventing the following conditions • Complication of hernia • Infertility • Fournier gangrene	-Clinical round with senior staff	
K. Work with health care professionals, including those from other disciplines, to provide patient-focused care	-Clinical round with senior staff	
L. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible medical records)		

D-General Skills

As mentioned in unit 1

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

Time Schedule: Second Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
Unit 1 Principles in General Surgery				
1. Types of wounds	A,C-E	A-J	A-L	A-P
2. Factor affecting wound healing	A,C-E	A-J	A-L	A-P
3. Management of multiple injury patients	A,C-E	A-J	A-L	A-P
4. causes of mortality due to trauma	A,C-E	A-J	A-L	A-P
5. Fluid and electrolyte imbalance	A,C-E	A-J	A-L	A-P
6. Acid base disequilibrium	A,C-E	A-J	A-L	A-P
7. Planning of fluid and electrolyte therapy	A,C-E	A-J	A-L	A-P
8. Classification of hemorrhage	A,C-E	A-J	A-L	A-P
9. Management of blood transfusion	A,C-E	A-J	A-L	A-P
10. Complication of blood transfusion	A,C-E	A-J	A-L	A-P
11. Defects of haemostasis	A,C-E	A-J	A-L	A-P
12. Abnormal bleeding during surgery or in postoperative period	A,C-E	A-J	A-L	A-P
13. Types of shock	A,C-E	A-J	A-L	A-P
14. Management of shock	A,C-E	A-J	A-L	A-P

15. Complication of surgical infections	A,C-E	A-J	A-L	A-P
16. Management of surgical infections	A,C-E	A-J	A-L	A-P
17. Burns and reconstructive surgery	A,C-E	A-J	A-L	A-P
18. Causes, diagnosis of malnutrition in the surgical patients	A,C-E	A-J	A-L	A-P
19. Nutritional support to surgical patients	A,C-E	A-J	A-L	A-P
20. Etiology, diagnosis and treatment of tumors	A,C-E	A-J	A-L	A-P
21. Indication, technical consideration, complications and results of renal, hepatic pancreatic cardiac and bone marrow transplantation	A,C-E	A-J	A-L	A-P
22. Terminal care in surgical patient	A,C-E	A-J	A-L	A-P
Unit 2 GIT Surgery				
Section 1: Esophagus:	A-H	A-J	A-L	A-P
1. Congenital anomalies of the esophagus	A-H	A-J	A-L	A-P
2. Congenital diaphragmatic hernia	A-H	A-J	A-L	A-P
3. Esophageal injuries	A-H	A-J	A-L	A-P
4. Neuromuscular abnormalities	A-H	A-J	A-L	A-P
5. Esophageal hiatus hernia	A-H	A-J	A-L	A-P
6. Esophageal carcinoma	A-H	A-J	A-L	A-P
7. Dysphagia	A-H	A-J	A-L	A-P
Section 2: stomach and duodenum	A-H	A-L	B,C	G,I

1. Congenital hypertrophic pyloric stenosis	A-H	A-J	A-L	A-P
2. Acute gastric dilatation	A-H	A-J	A-L	A-P
3. Peptic ulcer	A-H	A-J	A-L	A-P
4. Complication f gastric operations	A-H	A-J	A-L	A-P
5. Neoplasms of the stomach	A-H	A-J	A-L	A-P
6. Gastrectomy	A-H	A-J	A-L	A-P
Section 3 : liver	A-H	A-J	A-L	A-P
1. Liver trauma	A-H	A-J	A-L	A-P
2. Infection of the liver	A-H	A-L	B,C	G,I
3. Portal hypertension	A-H	A-J	A-L	A-P
4. Liver tumors	A-H	A-J	A-L	A-P
Section 4 : Biliary System:	A-H	A-J	A-L	A-P
1. Congenital anomalies of gall bladder and bile duct	A-H	A-J	A-L	A-P
2. Gall stones	A-H	A-J	A-L	A-P
3. Stricture of the biliary tract	A-H	A-J	A-L	A-P
4. Carcinoma of the gall bladder	A-H	A-J	A-L	A-P
5. Jaundice	A-H	A-J	A-L	A-P
Section 5 : Pancrease	A-H	A-L	B,C	G,I
1. Congenital anomalies of the pancreas	A-H	A-J	A-L	A-P
2. Pancreatic neoplasm	A-H	A-J	A-L	A-P
Section 6 : Spleen:	A-H	A-J	A-L	A-P
1. Congenital anomalies	A-H	A-J	A-L	A-P
2. Rupture of spleen	A-H	A-J	A-L	A-P
3. Infections of spleen	A-H	A-J	A-L	A-P
4. Cyst of spleen	A-H	A-J	A-L	A-P
5. Tumors the spleen	A-H	A-J	A-L	A-P
6. Splenomegaly	A-H	A-L	B,C	G,I
7. Hemolytic anemia	A-H	A-J	A-L	A-P
8. Hypersplenism	A-H	A-J	A-L	A-P

9. splenictomy	A-H	A-J	A-L	A-P
Section 7 : Peritoneum mesentery and omentum :	A-H	A-J	A-L	A-P
1. Peritonitis	A-H	A-J	A-L	A-P
2. Interapertoneal abscess	A-H	A-J	A-L	A-P
3. Peritoneal tumors	A-H	A-J	A-L	A-P
4. Ascites	A-H	A-J	A-L	A-P
5. Torsion of omentum	A-H	A-L	B,C	G,I
6. Mesenteric cyst	A-H	A-J	A-L	A-P
7. Mesenteric lymphadenitis	A-H	A-J	A-L	A-P
8. Retropertoneal tumors	A-H	A-J	A-L	A-P
Section 8 : small and large intestine :	A-H	A-J	A-L	A-P
1. Principles of Colonic Surgery	A-H	A-J	A-L	A-P
2. Intestinal stoma	A-H	A-J	A-L	A-P
3. Congenital anomalies	A-H	A-J	A-L	A-P
4. Intestinal trauma	A-H	A-J	A-L	A-P
5. Intestinal fistula	A-H	A-L	B,C	G,I
6. Intestinal diverticulae	A-H	A-J	A-L	A-P
7. Inflammatory bowel disease	A-H	A-J	A-L	A-P
8. Intestinal ischemia	A-H	A-J	A-L	A-P
9. Intestinal tumors	A-H	A-J	A-L	A-P
10. Intestinal obstruction	A-H	A-J	A-L	A-P
11. Rectal prolapse	A-H	A-J	A-L	A-P
Section 9 : Vermiform Appendix	A-H	A-J	A-L	A-P
1. Appendicitis	A-H	A-J	A-L	A-P
2. Neoplasm of the appendix	A-H	A-L	B,C	G,I
Section 10 : Anal Canal	A-H	A-J	A-L	A-P
1. Pilonidal sinus	A-H	A-J	A-L	A-P
2. Anal fissure	A-H	A-J	A-L	A-P
3. Hemorrhoids	A-H	A-J	A-L	A-P
4. Anorectal abscess	A-H	A-J	A-L	A-P

5. anal fistula	A-H	A-J	A-L	A-P
6. fecal incontinence	A-H	A-J	A-L	A-P
7. anal canal and anal verge tumors	A-H	A-J	A-L	A-P
	A-H	A-L	B,C	G,I
Section 11 : Review Subject	A-H	A-J	A-L	A-P
1. abdominal tumors in children	A-H	A-J	A-L	A-P
2. haematemesis	A-H	A-J	A-L	A-P
3. Bleeding/rectum	A-H	A-J	A-L	A-P
Unit 3 Breast and Endocrinal Surgery				
1-Developmental abnormalities of thyroglossal duct	A,D-I	A-L	A-L	A-P
2- Goiter	A,D-I	A-L	A-L	A-P
3- Hyperparathyroidism	A,D-I	A-L	A-L	A-P
4- Hypoparathyroidism	C-I	A-L	A-L	A-P
5. Adrenal tumors	A,D-I	A-L	A-L	A-P
6- Congenital anomalies of the breast	B,H	A-E,G-L	-	A-P
7- Inflammation of the breast	B	A-E,G-L	-	A-P
8- Fibrocystic diseases of the breast	B.H	A-E,G-L	B-D,I,J,L	A-P
9- Cyst of the breast	B,H	A-E,G-L	B	A-P
10- Nipple discharge	B,H	A-E,G-L	B-F,I,J,L	A-P
11- Breast neoplasm	B,H	A-E,G-L	B-D,I,J,L	A-P
12- Diseases of male Breast	B,H	A-E,G-L	B-,I,J,L	A-P
Unit 4 Maxillofacial and Neck surgery				
Congenital anomalies of the face and tongue	B	A-E,G-L	-	A-G,J-P
Maxillofacial injuries	A,C-I	A-L	A-L	A-P
Infections of the face and tongue	A,D-I	A-L	A-L	A-P
Neoplasms of the tongue and jaws	A,D-I	A-L	A-L	A-P

Diseases of the salivary glands	A,D-I	A-L	A-L	A-P
Differential diagnosis of neck masses and their treatment	B,H	A-E,G-L	A-C,E, G-L	A-G,J-P
Unit 5 Abdominal Wall, Hernias, Testis and Scrotal disorders				
Abdominal incision	A,B, D-I	A-L	A-L	A-P
Disease of abdominal wall	A,B, D-I	A-L	A-L	A-P
Inguinal Hernia	A,B, D-I	A-L	A-L	A-P
Femoral Hernia	C-I	A-L	A-L	A-P
Umbilical Hernia	B	A-E,G-L	-	A-G,J-P
Epigastric Hernia	B,D -I	A-L	A-L	A-P
Other rare types of Hernias	B,D -I	A-L	A,E-L	A-P
Congenital anomalies of the testis	A,B, D-I	A-L	A-L	A-P
Inflammatory, conditions of testis and spermatic cord	A,B, D-I	A-L	A-L	A-P
Neoplasm of the testis	A,B, D-I	A-L	A-L	A-P
Varicocele	C-I	A-L	A-L	A-P
Hydrocele	B	A-E,G-L	-	A-G,J-P
Fournier's gangrene	B,D -I	A-L	A-L	A-P
Carcinoma of the Pines	B,D -I	A-L	A,E-L	A-P

5. Course Methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Outpatient
3. Inpatient
4. Clinical rounds
5. Clinical rotations
6. Service teaching
7. Direct observation
8. Post graduate teaching
9. Hand on workshops
10. Perform under supervision of senior staff
11. Simulations

12. Present a case (true or simulated) in a grand round
13. Case Taking
14. journal club,
15. Critically appraised topic,
16. Educational prescription
17. Observation & supervision
18. Written & oral communications

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:

- Clinical examination
- Written
- Oral examination
- Chick list
- log book & portfolio
- Procedure/case presentation
- One MCQ examination in f the second year and one in the third year
- Objective structured clinical examination
- Check list evaluation of live or recorded performance
- Record review (report)
- Patient survey
- 360o global rating

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

iii. Marks: 1200 marks

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies
- Principles of General Surgery Book by Staff Members of the Department of General Surgery-Assiut University

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

- Sabiston Textbook of Surgery: The Biological Basis of Modern Surgical Practice 20th Edition
- Schwartz. SCHWARTZ'S PRINCIPLES OF SURGERY 2-volume set 11th edition 11th Edition, 2019
- Rosai and Ackerman's Surgical Pathology Juan Rosai, Mosby 2004
- Sternberg's Diagnostic surgical Pathology 4th edition, 2004

iv. Periodicals, Web sites, … etc

- **Periodicals**
  - American Journal of General Surgery
  - BSJ
  - European Journal of General Surgery
  - Egyptian Journal of General Surgery
  - American journal of Anatomy.
  - Journal of applied Anatomy.
  - Human pathology
  - Histopathology
  - American Journal of surgical pathology
- **Web Sites**:
  - European Society of Surgery , www.Essurg.org,
  - www.Americanjournalofsurgery.com,
  - **:** http://www.ncbi.nlm.nih.gov/pubmed.

v. **Others** None

9. Signatures

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

ANNEX 2
Program Academic Reference Standards (ARS)

1- Graduate attributes for medical doctorate in general surgery

***The Graduate (after residence training and medical doctorate years of study) must*:**

1- Demonstrate competency and mastery of basics, methods and tools of scientific research and clinical audit in General surgery

2- Have continuous ability to add knowledge to General surgery through research and publication.

3- Appraise and utilise relevant scientific knowledge to continuously update and improve clinical practice.

4- Acquire excellent level of medical knowledge in the basic biomedical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care and scientific research.

5- Function as a leader of a team to provide patient care that is appropriate, effective and compassionate for dealing with health problems and health promotion.

6- Identify and create solutions for health problems in General surgery.

7- Acquire an in depth understanding of common areas of General surgery, from basic clinical care to evidence based clinical application, and possession of required skills to manage independently all problems in these areas.

8- Demonstrate leadership competencies including 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.

9- Function as teacher in relation to colleagues, medical students and other health professions.

10- Master decision making capabilities in different situations related to General surgery.

11- Show leadership 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.

12- Demonstrate in depth awareness of public health and health policy issues including independent ability to improve health care, and identify and carryout system-based improvement of care.

13- Show model attitudes and professionalism.

14- Demonstrate commitment for lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages and in General surgeryor one of its subspecialties.

15- Use recent technologies to improve his practice in General surgery.

16- Share in updating and improving clinical practice in General surgery.

2- Competency based Standards for medical doctorate in General surgery

22.1- Knowledge and understanding

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

2-1-A- Established, updated and evidence- based theories, basics and developments of General surgery and relevant sciences.

2-1-B- Basics, methods and ethics of medical research.

2-1-C- Ethical and medicolegal principles of medical practice related to General surgery**.**

2-1-D- Principles and measurements of quality in General surgery**.**

2-1-E- Principles and efforts for maintainace and improvements of public health.

2- Intellectual skills

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

2-2-A- Application of basic and other relevant science to solve General surgeryrelated Problems.

2-2-B- Problem solving based on available data.

2-2-C- Involvement in research studies related to General surgery.

2-2-D- Writing scientific papers.

2-2-E- Risk evaluation in the related clinical practice.

2-2-F- Planning for performance improvement in General surgery.

2-2-G- Creation and innovation in General surgery**.**

2-2-H- Evidence – based discussion.

2-2-I- Decision making in different situations related to General surgery.

2.3- Clinical skills

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

- ***Competency-based outcomes for Patient Care:-***

2-3-A- MD students must be able to provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence – based clinical application and possession of skills to manage independently all problems in General surgery.

2-3-B- Master patient care skills relevant to General surgeryfor patients with all diagnoses and procedures.

2-3-C- Write and evaluate reports for situations related to the 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-Master 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 competently all information sources and technology to improve his practice.

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

- ***Competency-based objectives for Interpersonal and Communication Skills***

2-4-D-Master 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-Master Professionalism behavior, 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- Participate in improvement of the education system.

2-4-H- Demonstrate skills of leading scientific meetings including time management

2-4-O- 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 MD 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 MD students 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 MD 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 MD doctor's performance on checklists and provide feedback for history taking, physical examination, and communication skills. Physicians may also rate the MD doctor's performance.

- Objective Structured Clinical Examination (OSCE) – A series of stations with standardized tasks for the MD doctors to perform. Standardized patients and other assessment methods often are combined in an OSCE. An observer or the standardized patient may evaluate the MD doctors.

- Procedure or Case Logs – MD 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 MD 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 – MD doctors, faculty, nurses, clerks, and other clinical staff evaluate MD doctors from different perspectives using similar rating forms.
- Portfolios – A portfolio is a set of project reports that are prepared by the MD doctors to document projects completed during the MD 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 – MD 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 MD doctors.

Annex 5, program evaluation tools

By whom	Method	sample
Quality Assurance Unit	Reports Field visits	#1
External Evaluator (s):According to department council External Examiner (s): According to department council	Reports Field visits	#2
Stakeholders	Reports Field visits questionnaires	#5
Senior students	questionnaires	#12
Alumni	questionnaires	#

Annex 6, Program Correlations:

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

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

1- Graduate attributes

Faculty ARS	NAQAAE General ARS for Postgraduate Programs
1- Demonstrate competency and mastery of basics, methods and tools of scientific research and clinical audit in General surgery.	1-إتقان أساسيات و منهجيات البحث العلمي
2- Have continuous ability to add knowledge new developments to General surgerythrough research and publication.	2-العمل المستمر علي الإضافة للمعارف في مجال التخصص
3- Appraise and utilise scientific knowledge to continuously update and improve clinical practice and relevant basic sciences.	3-تطبيق المنهج التحليلي والناقد للمعارف في مجال التخصص و المجالات ذات العلاقة
4- Acquire excellent level of medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care and scientific	4-دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا و مطورا للعلاقات البينية بينها
5- Function as a leader of a team to provide patient care that is appropriate, compassionate for dealing with effective and health Problems and health promotion. 7- Acquire an in depth understanding of common areas of speciality, from basic clinical care to evidence based clinical application, and possession of skills to manage independently all problems in these areas.	5-إظهار وعيا عميقا بالمشاكل الجارية و النظريات الحديثة في مجال التخصص
6- Identify and create solutions for health problems in General surgery.	6-تحديد المشكلات المهنية و إيجاد حلولا مبتكرة لحلها
5- Function as a leader of a team to provide patient care that is appropriate, effective and compassionate for dealing with health problems and health promotion.	7-إتقان نطاقا واسعا من المهارات المهنية في مجال التخصص

7- Acquire an in depth understanding of common areas of General surgery, from basic clinical care to evidence based clinical application, and possession of skills to manage independently all problems in these areas.	
8 - Share in updating and improving clinical practice in General surgery. - Function as teacher in relation to colleagues, medical students and other health professions.	8- التوجه نحو تطوير طرق و أدوات و أساليب جديدة للمزاولة المهنية
9- Use recent technologies to improve his practice in General surgery.	9-استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية
8- Demonstrate leadership competencies including 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. 5- Function as a leader of a team to provide patient care that is appropriate, effective and compassionate for dealing with health problems and health promotion.	10-التواصل بفاعلية و قيادة فريق عمل في سياقات مهنية مختلفة
10- Master decision making capabilities in different situations related to General surgery.	11-اتخاذ القرار في ظل المعلومات المتاحة
11- Show leadership 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.	12-توظيف الموارد المتاحة بكفاءة و تنميتها والعمل على إيجاد موارد جديدة
12- Demonstrate in depth awareness of public health and health policy issues including independent ability to improve health care, and identify and carryout system-based improvement of care.	13-الوعي بدوره في تنمية المجتمع والحفاظ على البيئة

13- Show model attitudes and professionalism.	14-التصرف بما يعكس الالتزام بالنزاهة و المصداقية و قواعد المهنة
14- Demonstrate commitment for lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages and in General surgeryor one of its subspecialties. 15- Use recent technologies to improve his practice in General surgery.	15-الالتزام بالتنمية الذاتية المستمرة و نقل علمه و خبراته للآخرين

- Academic standards

Faculty ARS	NAQAAE General ARS for Postgraduate Programs
2.1. A- Established, updated and evidence- based theories, basics and developments of General surgeryand relevant sciences.	2-1-أ- النظريات و الأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة
2.1. B- Basic, methods and ethics of medical research.	2-1-ب –أساسيات و منهجيات و أخلاقيات البحث العلمي و أدواته المختلفة
2.1. C- Ethical and medicologal principles of medical practice related to General surgery.	2-1-ج- المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص
2.1. D- Principles and measurements of quality in General surgery.	2-1-د مبادئ و أساسيات الجودة في الممارسة المهنية في مجال التخصص
2.1. E- Principles and efforts for maintains and improvements of public health.	2-1-هـ – المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها
2.2. A- Application of basic and other relevant science to solve General surgeryrelated problems.	2–2–أ –تحليل و تقييم المعلومات في مجال التخصص و القياس عليها و الاستنباط منها
2.2.B- Problem solving based on available data.	2–2–ب –حل المشاكل المتخصصة استنادا علي المعطيات المتاحة
2.2.C- Involvement in research studies related to General surgery	2–2–ج –إجراء دراسات بحثية تضيف إلى المعارف
2.2. D- Writing scientific papers.	2–2–د– صياغة أوراق علمية
2.2. E- Risk evaluation in the related clinical practice	2–2—هـ تقييم المخاطر في الممارسات المهنية
2.2.F- Planning for performance improvement in General surgery	2–2–و –التخطيط لتطوير الأداء في مجال التخصص

2-2-G- Creation and innovation in the General surgery.	2-2-ز- الابتكار /الإبداع
2.2. H- Evidence – based discussion.	2-2-ح- الحوار والنقاش المبني علي البراهين والأدلة
2.2.I- Discussion making in different situations related to General surgery.	2-2-ط -اتخاذ القرارات المهنية في سياقات مهنية مختلفة
2.3. A- MD students must be able to provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence – based clinical application and possession of skills to manage independently all problems in General surgery. 2.3. B- Master patient care skills relevant to General surgeryor patients with all diagnoses and procedures.	2-3-أ -إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص
2.3. C- Write and evaluate reports for situations related to the field of General surgery.	2-3-ب- كتابة و تقييم التقارير المهنية.
2.4.A-Master 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	2-3-ج -تقييم و تطوير الطرق و الأدوات القائمة في مجال التخصص
2.4.B- Use competently all information sources and technology to improve his practice.	2-3-د - استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية
2.4.A-Master 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.G- Participate in improvement of the education system.	2-3-هـ -التخطيط لتطوير الممارسة المهنية وتنمية أداء الآخرين

II-Program ARS versus program ILOs

Comparison between ARS- ILOS for medical doctorate

(ARS)	(ILOs)
2-1- Knowledge and understanding	***2-1- Knowledge and understanding***
2-1-A- Established, updated and evidence-based Theories, Basics and developments of General surgeryand relevant sciences.	**2-1-A**- Demonstrate in-depth knowledge and understanding of theories, basics and updated biomedical, clinical epidemiological and socio behavioral science relevant to his speciality as well as the evidence – based application of this knowledge to patient care.
2-1-B Basic, methods and ethics of medical research.	**2-1-B-** Explain basics, methodology, tools and ethics of scientific medical, clinical research.
2-1-C- Ethical and medicologal principles of medical practice related to General surgeryfield.	**2-1-C-** Mention ethical, medico logical principles and bylaws relevant to his practice in the field of General surgery.
2-1-D- Principles and measurements of quality in the General surgery.	**2-1-D-** Mention principles and measurements of quality assurance and quality improvement in medical education and in clinical practice of General surgery.
2-1-E-Principles and efforts for maintains and improvements of public health.	**2-1-E-** Mention health care system, public health and health policy, issues relevant to this speciality and principles and methods of system – based improvement of patient care in common health problems of the field of General surgery.
***2-2- Intellectual skills*:**	***2-2- Intellectual skills:***
2-2-A-Application of basic and other relevant science to solve General surgery. related problems.	**2-2-A-** Apply the basic and clinically supportive sciences which are appropriate to General surgeryrelated conditions / problem / topics.

2-2-B-Problem solving based on available data.	**2-2-B-** Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to General surgery.
2-2-C- Involvement in research studies related to the General surgery.	**2-2-C-** Plain research projects.
2-2-D Writing scientific papers.	**2-2-D-** Write scientific paper.
2-2-E-Risk evaluation in the related clinical practice.	**2-2-E-** Participate in clinical risk management as a part of clinical governance.
2-2-F-Planning for performance improvement in the General surgeryfield.	**2-2-F-** Plan for quality improvement in the field of medical education and clinical practice in his speciality.
2-2-G-Creation and innovation in the speciality field.	**2-2-G-** Create / innovate plans, systems, and other issues for improvement of performance in his practice.
2-2-H-Evidence – based discussion.	**2-2-H-** Present and defend his / her data in front of a panel of experts.
2-2-I-Decision making in different situations related to General surgeryfields.	**2-2-I-** Formulate management plans and alternative decisions in different situations in the field of the General surgery

continuous (ARS)	continuous (ILOs)
2-3- Clinical skills:	***2/3/1/Practical skills (Patient care :)***
2-3-A- MD students must be able to provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence – based clinical application and possession of skills to manage independently all problems in his field of practice.	**2-3-1-A-** Provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. ***p.s.*** Extensive level means in-depth understanding from basic science to evidence – based clinical application and possession of skills to manage independently all problems in field of practice.
2-3-B- Master patient care skills relevant to General surgeryfor patients with all diagnoses and procedures.	**2-3-1-B-** Provide extensive level of patient care for patients with all common diagnoses and for uncomplicated procedures related to General surgery
	2-3-1-C- Provide extensive level of patient care for non-routine, complicated patients and under increasingly difficult circumstances, while demonstrating compassionate, appropriate and effective care.
	2-3-1-D- Perform diagnostic and therapeutic procedures considered essential in the field of General surgery
	2-3-1-E- Handles unexpected complications, while demonstrating compassion and sensitivity to patient needs and concerns.
	2-3-1-F- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families in the General surgeryrelated situations.

	2-3-1-G- Gather essential and accurate information about patients of the General surgeryrelated conditions. **2-3-1-H** Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence and clinical judgment for the General surgeryrelated conditions. **2-3-1-I-** Develop and carry out patient management plans for General surgeryrelated conditions. **2-3-1-J-** Counsel and educate patients and their families about General surgeryrelated conditions. **2-3-1-K-** Use information technology to support patient care decisions and patient education in all General surgeryrelated clinical situations. **2-3-1-L-** Perform competently all medical and invasive procedures considered essential for the General surgeryrelated conditions / area of practices. **2-3-1-M-** Provide health care services aimed at preventing the General surgeryrelated health problems. **2-3-1-N-** Lead health care professionals, including those from other disciplines, to provide patient-focused care in General surgeryrelated conditions**.**

2-3-C- Write and evaluate reports for situations related to the field General surgery.	**2-3-1-O-** Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive timely and legible medical records).
2-4- General skills **2-4-A-** Master 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	***2/3/2 General skills*** **2-3-2-A-** Demonstrate the competency of continuous evaluation of different types of care provision to patients in the different area of General surgery **2-3-2-B-** Appraise scientific evidence. **2-3-2-C-** Continuously improve patient care based on constant self-evaluation and life-long learning. **2-3-2-D**. Participate in clinical audit and research projects. **2-3-2-E-** Practice skills of evidence-based Medicine (EBM). **2-3-2-G-** Design logbooks. **2-3-2-H-** Design clinical guidelines and standard protocols of management. **2-3-2-I-** Appraise evidence from scientific studies related to the patients' health problems.

2-4-B- Use competently all information sources and technology to improve his practice.	**2-3-2-J-** Apply knowledge of study designs and statistical methods to the appraisal of clinical studies. **2-3-2-K**- Use information technology to manage information, access on- line medical information; for the important topics.
2-4-C- Master skills of teaching and evaluating others.	**2-3-2-F-** Educate and evaluate students, residents and other health professionals.
2-4-D- Master interpersonal and communication Skills that result in effective information exchange and teaming with patients, their families, and other health professionals.	**2-3-2-L**- Master interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals, including:- • Present a case. • Write a consultation note. • Inform patients of a diagnosis and therapeutic plan Completing and maintaining comprehensive. • Timely and legible medical records. • Teamwork skills. **2-3-2-M-** Create and sustain a therapeutic and ethically sound relationship with patients. **2-3-2-N**- Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills. **2-3-2-O-** Work effectively with others as a member or leader of a health care team or other professional group.
2-4-E- Master Professionalism behavior, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical	**2-3-2-P-** Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.

principles, and sensitivity to a diverse patient population.	**2-3-2-Q-** Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices. **2-3-2-R-** Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.
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**- Participate in improvement of the education system.	**2-3-2-S-** Work effectively in health care delivery settings and systems related to General surgeryincluding good administrative and time management. **2-3-2-T-** Practice cost-effective health care and resource allocation that does not compromise quality of care. **2-3-2-U-** Advocate for quality patient care and assist patients in dealing with system complexities. **2-3-2-V-** Design, monitor and evaluate specification of under and post graduate courses and programs.
2-4-H- Demonstrate skills of leading scientific meetings including time management	**2-3-2-W-** Act as a chair man for scientific meetings including time management **2-3-2-S-** Work effectively in health care delivery settings and systems related to General surgeryincluding good administrative and time management.
2-4-O- Demonstrate skills of self and continuous learning.	From A-H.

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
Course 1 : Medical statistics		✓			
Course 2 : Research Methodology		✓			
Course 3 : **Medicolegal Aspects & Ethics in Medical Practice and Scientific Research**			✓		
Course 4 Surgical Anatomy	✓				
Course 5 Surgical Pathology	✓				
Course 6 : " General Surgery "	✓	✓	✓	✓	✓

Intellectual

Course	Program covered ILOs								
	2/2/A	2/2/B	2/2/C	2/2/D	2/2/E	2/2/F	2/2/G	2/2/H	2/2/I
Course 1 : Medical statistics			✓	✓				✓	
Course 2 : Research Methodology			✓	✓				✓	
Course 3 : **Medicolegal Aspects & Ethics in Medical Practice and Scientific Research**								✓	
Course 4 Surgical Anatomy	✓	✓							
Course 5 Surgical Pathology	✓	✓							
Course 6 : " General Surgery "	✓	✓	✓	✓	✓	✓	✓	✓	✓

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 : Medical statistics								
Course 2 : Research Methodology								
Course 3 : **Medicolegal Aspects & Ethics in Medical Practice and Scientific Research**				✓				✓
Course 4 Surgical Anatomy								
Course 5 Surgical Pathology								
Course 6 : " General Surgery "	✓	✓	✓	✓	✓	✓	✓	✓

Course	Program covered ILOs						
	2/3/1/I	2/3/1/ J	2/3/1/ K	2/3/1/ L	2/3/1/ M	2/3/1/ N	2/3/1/ 0
Course 1 : Medical statistics							
Course 2 : Research Methodology							
Course 3 : **Medicolegal Aspects & Ethics in Medical Practice and Scientific Research**	✓						✓
Course 4 Surgical Anatomy							
Course 5 Surgical Pathology							
Course 6 : " General Surgery "	✓	✓	✓	✓	✓	✓	✓

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 : Medical statistics		✓						
Course 2 : Research Methodology		✓		✓	✓			
Course 3 : Medicolegal Aspects & Ethics in Medical Practice and Scientific Research								
Course 4 Surgical Anatomy								
Course 5 Surgical Pathology								
Course 6 : " General Surgery "	✓	✓	✓	✓	✓	✓	✓	✓

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	2/3/2/P
Course 1 : Medical statistics	✓	✓	✓					
Course 2 : Research Methodology	✓	✓						
Course 3 : Medicolegal Aspects & Ethics in Medical Practice and Scientific Research				✓				
Course 4 Surgical Anatomy			✓	✓				
Course 5 Surgical Pathology			✓	✓				
Course 6 : " General Surgery "	✓	✓	✓	✓	✓	✓	✓	✓

General Skills

Course	Program covered ILOs						
	2/3/2/Q	2/3/2/R	2/3/2/S	2/3/2/T	2/3/2/U	2/3/2/V	2/3/2/W
Course 1 : Medical statistics							
Course 2 : Research Methodology							
Course 3 : Medicolegal Aspects & Ethics in Medical Practice and Scientific Research							
Course 4 Surgical Anatomy	✓		✓				
Course 5 Surgical Pathology	✓		✓				
Course 6 : " General Surgery "	✓	✓	✓	✓	✓	✓	✓

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. External Evaluator (s):
2. Prof Dr. Abdel Hafith Hosny Sohag University
3. External Examiner (s):
4. Prof Dr. Hamdy Abo Beih. El Menia University.
5. Prof Dr. Moustafa El Sanadeky.. El Menia University.
6. Prof Dr. Mansour Ghoubashi , Khena University.
7. 4 Internal evaluator:
8. Prof .Dr Gamal Abdel Hamiud.
9. Prof Dr. Abdel Rady Abdel Salam,.
   Prof. Dr. Moustafa Abdel Ghafour.

Stakeholders of graduéé:

Senior students

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)