Master (MSc) Degree Program and Courses Specifications for General Surgery

(According to currently applied bylaws)

General Surgery Department

Faculty of medicine

Minia University

2023

CONTENTS

Section I:

PROGRAMME INFORMATION

Department of General Surgery

Degree: Master degree (MSc) of General Surgery (GS200)

University: Minia

Faculty: Medicine

Department: General Surgery

Last date of approval: 5/3 /2023

A. Basic Information:

1. **Programme title:** Master degree of General Surgery
2. **Final award:** Master degree (MSc) of General Surgery
3. **Programme type:** single double multiple
4. **Responsible department:** Department of General Surgery
5. **Departments involved in the programme:** Department of General Surgery
6. **Programme duration:** 2 years
7. **Number of programme courses:** 7
8. **Head of Department:** Prof. Dr. Amr Hamdy
9. **Coordinator:** Dr. Yasser Ali Kamal
10. **External evaluator:** Prof. Dr. Alaa Ahmed Radwan
11. **Programme management team:** Dr. Abdel-rahman Gamal Saleh, Dr. Mohamed Jamal El-sherif

B. Professional information:

1. Programme aims:

Graduate of Master degree of General Surgery**, the candidate should be able to:**

1- Appraise and utilize scientific knowledge that essential for the practice of General Surgery.

2- Demonstrate satisfactory level of clinical skills and bedside care skills as well as clinical experience and competence in the area of General Surgery.

3- Demonstrate the basics of scientific medical research necessary to understand the published scientific research and get their own research.

4- Acquire provision of sound principles that enable candidates to start their professional careers as specialists of General Surgery.

2. Intended Learning Outcomes (ILOs):

(a) Knowledge and understanding:

By the end of the study of **Master degree of General Surgery** the candidate should be able to:

a.1 Explain the essential facts and principles of relevant basic sciences including Pathology, Anatomy, Histology and Physiology, pharmacology biochemistrya, and medical ethics related to General Surgery.

a.2 Recognize essential facts of clinically supportive sciences including General Surgery.

a.3 Identify etiology, pathogenesis, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to General Surgery.

a.4 Identify the basic ethical and medicolegal principles that should be applied in practice and are relevant to the General Surgery.

a.5 Identify the basics and standards of quality assurance to ensure good clinical care practice in the field of General Surgery.

a.6 Identify the ethical and scientific principles of medical research in General Surgery.

a.7 Explain the impact of common health problems in the field of General Surgery on the society and how good clinical practice improves these problems.

a.8 Idetify recent advances techiques and procedursin the practice of General Surgery

(b) Intellectual skills

By the end of the **Master degree of General Surgery** the candidate should be able to:

b.1 Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the General Surgery.

b.2 Solve problems of common clinical situations related to General Surgery using an investigatory and analytic thinking approach.

b.3 Design a research study or review on common clinical problems relevant to the field of General Surgery.

b.4 Formulate management plans and alternative decisions in different situations in the field of the General Surgery.

b.5 Assess risk in professional practices in the field of General Surgery.

b.6 Plan for the development of performance in the field of General Surgery.

b.7 Combine knowledge for professional problems' solving.

b.8 Assess common ethical dilemma and its proper sollution

*** Skills:**

(c) Professional and practical skills

By the end of the study of **Master degree of General Surgery** the candidate should be able to:

c.1 Carry out patient management plans (clinical diagnosis, investigations, and modality of treatment) for common conditions related to General Surgery.

c.2 Use information technology to support patient care decisions and patient education in common clinical situations related to General Surgery.

c.3 Perform competently non invasive and invasive procedures considered essential for the General Surgery.

c.4 Provide health care services aimed at preventing health problems related to General Surgery.

c.5 Provide patient-focused care in common conditions related to General Surgery, while working with health care professionals, including those from other disciplines.

c.6 Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.

c.7 Orgaize a proper medical report

(d) General and transferable skills

By the end of the study of **Master degree of General Surgery** the candidate should be able to:

d.1 Perform practice-based improvement activities using a systematic methodology

d.2 Perform data management including data entry and analysis using information technology to manage information, access online medical information; and support own education.

d.3 Maintain therapeutic and ethically sound relationship with patients.

d.4 Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.

d.5 Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.

d.6 Practice cost-effective health care and resource allocation that does not compromise quality of care.

d.7 Assist patients in dealing with system complexities.

d.8 Be aware of the importance of life-long self-learning and show a strong commitment to it.

d.9 Organize material from different scientific sources including library, electronic and online resources.

d.10 Dealing effectively with unethical behavior of other members of healthcare team.

3. Programme Academic Reference Standards:

3a- Minia faculty of medicine adopted the general national academic reference standards provided by the national authority for quality assurance and accreditation of education (NAQAAE) for all postgraduate programs. . (faculty council Degree No.6854, in its cession No.177 Dated :18\5\2009).

Comparison between National Academic Quality Assurance & Accreditation (NAQAAE) General Academic Reference Standards (GARS) and Faculty Academic Reference Standards (ARS)

المعايير القياسية العامة: **NAQAAE General Academic Reference Standards "GARS" for MD Programs**	**ILOS of the** Master degree of General Surgery **programme-faculty of medicine-Minia University**	**remarks**
المعرفة والفهم:1.		
أ- النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة	a.1, a.2, a.3.a.8	100%
ب- أساسيات ومنهجيات وأخلاقيات البحث العلمي وأدواته المختلفة	a.6	
ج- المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص	a.4	
د- مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص	a.5	
ه- المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها	a.7	
: ٢. المهارات الذهنية		**100%**
أ. تحليل وتقييم المعلومات في مجال التخصص والقياس عليها والاستنباط منها	b.1, b.2, b.4	
ب. حل المشاكل المتخصصة استنادا على المعطيات المتاحة	b.2, b.4, b.7, b.8	
ج. إجراء دراسات بحثية تضيف إلى المعارف	b.3	
د. صياغة أوراق علمية	b.3	
ز. تقييم المخاطر في الممارسات المهنية	b.5	
س. التخطيط لتطوير الأداء في مجال التخصص	b.6	
و. اتخاذ القرارات المهنية في سياقات مهنية مختلفة	b.2, b.4	
ي. الابتكار/ الإبداع / الحوار والنقاش المبني على البراهين والأدلة	b.7	
مهارات المهنية: .3.		

أ- إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص	c.1, c.3	
ب-. كتابة وتقييم التقارير المهنية	c.6, c.7	**100%**
ج-. تقييم وتطوير الطرق والأدوات القائمة في مجال التخصص	c.4	
د. استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية	c.٢	
ه. التخطيط لتطوير الممارسة المهنية وتنمية أداء الآخرين	c.٥	
4. المهارات العامة والمنتقلة :		
أ-. التواصل الفعال بأنواعه المختلفة	d.4, d.5	
ب-. استخدام تكنولوجيا المعلومات بما يخدم تطوير الممارسة المهنية	d.1, d.2	
ج. تعليم الآخرين وتقييم أداءهم	d.3, d.7	
د. التقييم الذاتي والتعلم المستمر	d.8	
ه. استخدام المصادر المختلفة للحصول على المعلومات والمعارف	d.1, d.9	**100%**
و. العمل في فريق وقيادة فرق العمل	d.5, d.10	
. إدارة اللقاءات العلمية والقدرة علي إدارة الوقت.ي	d.6	

3b- Then, Department of General Surgery has developed the academic standards (ARS) for Master degree (MSc) of General Surgery.

3c- Program External References: None

4. Programme structure:

Programme duration: 7semester (3.5 years).

	Hour/week		
Subject	**Lectures**	**Practical**	**Clinical**
First part			
Surgical Anatomy and Histology	**3**	**4**	

Physiology and Biochemistry	**3**	**4**	
Surgical Pathology	**2**	**2**	
Microbiology	**2**	**1**	
Pharmacology	**2**	**1**	
Medical ethics	**2**	**-**	
Second part			
General surgery & its special branches	**12**	**4**	

5. Programme courses

Course Title	Total No. of hours	No. of hours /week			Program ILOs Covered
		Lect.	Practical	Tutorial	
FIRST PART (Level of course):					
Surgical Anatomy and Histology: **Anatomy** **Histology**	65	48	17		a.1, a.2, a.3, b.1, b.2, c.1, c.2
Physiology and Biochemistry: **Physiology** **Biochemistry**	58.5	46.5	12		a.1, a.2, a.3, b.1, b.2, c.1, c.2
Surgical Pathology:	68	46	22		a.1, a.2, a.3, b.1, b.2, c.1, c.2
Microbiology:	45	40	5		a.1, a.2, a.3, b.1, b.2, c.1, c.2
Pharmacology:	42	33	12		a.1, a.2, a.3, b.1, b.2, c.1, c.2
Mediacl ethics	36	36	-		a4, b8, c7

Training programs and workshops, field visits, seminars& other scientific	continuous				a.1, a.2, a.3, b.1, b.2, c.1, c.2
SECOND PART (Level of course):					
General Surgery and its branches	720	540	180		a.2, a.3, a.4, a.5, a.6, a.7, a.8, b.1, b.2, b.3, b.4, b.5, b.6, b.7, b.8, c.1,c.2, c.3, c.4, c.5,c.6, c.7, d.1, d.2, d.3, d.4, d.5, d.6, d.7, d.8, d.9, d.10
Training programs and workshops, field visits, seminars& other scientific activities	continuous				a.2, a.3, a.4, a.5, a.6, a.7, a.8, b.1, b.2, b.3, b.4, b.5, b.6, b.7, b.8, c.1,c.2, c.3, c.4, c.5,c.6, c.7, d.1, d.2, d.3, d.4, d.5, d.6, d.7, d.8, d.9, d.10

6. Programme admission requirements:

A-Candidates should have either:

1. MBBCH degree from any Egyptian faculty of medicine or

2. Equivalent degree from medical schools abroad approved by the Ministry of Higher education.

B- Follows postgraduate regulatory rules of postgraduate studies of Minia Faculty of medicine.

7- Regulations for progression and programme completion

Duration of program is 4 semesters (2 years), from registration till the end of the second part; divided to:

First Part: (≥6 months=1 semester):

- All courses as specified in the internal by law
- At least six months after registration should pass before the student can ask for examination in the 1st part.
- Two sets of exams: 1st in May — 2nd in October.

• For the student to pass the first part exam, a score of at least 60% in each curriculum is needed. Those who fail in one curriculum need to re-exam it only.

Second Part: (≥18months=3 semesters):

- Program related specialized Courses.
- The student should pass the 1st part before he/she can ask for examination in the 2nd part, not more than 4 times. For both parts, fulfillment of the of log book (Attendance, effective discussion in seminars, performance in practical lab and other activities).

Third Part (Thesis/essay):

- Master thesis subject should be officially registered after registration for the Master degree and should be completed, defended and accepted after passing the second part final examination, not before 6 months from registering the subject.
- One research in national journal should be pubished from the Master thesis and accepted at least oneonth before aking for the second part exam.
- The duration of registered Master degree should not be more than 4 years till agreement of the Department council (after taking opinion of supervisors) and Faculty council.

8- Evaluation of programme intended learning outcomes:

Evaluator (By whom)	**Method/tool**	**Sample**
1. Senior students (Students of last year)	Questionnaires	All the students
2. Graduates (Alumni)	Questionnaires	10 at least
3. Stakeholders	Meeting Questionnaires	10 at least
4. External & Internal evaluators and external examiners	Reports	1 at least
5. Quality Assurance Unit	Reports Questionnaires Site visits	

6. Exams results	Results analysis Report	All the students

9 -**Methods of student assessment:**

Method of assessment	**The assessed ILOs**
1. Research (Thesis)	**a.** Knowledge & understanding, **b.** Intellectual skills **c.** Professional & practical skills **d.** General & transferable skills
2. Written Exams: • Short essay • MCQs • Problem solving	**a.** Knowledge & understanding **b.** Intellectual skills
3. Practical/Clinical Exams: • Case sheet • Case discussion • OSCE • Imaging slides	**a.** Knowledge & understanding **b.** Intellectual skills **c.** Professional & practical skills
4. Seminars, presentations, assignments	**a.** Knowledge & understanding, **b.** Intellectual skills **c.** Professional & practical skills **d.** General & transferable skills
5. Oral Exams	**a.** knowledge & understanding **b.** Intellectual skills

	c. General & transferable skills

Last update and approval: 5/3/2023

Head of the General Surgery **department:**

Prof. Dr. Amr Hamdy

Section II:

SPECIFICATION OF COURSES

Course (1) Surgical Anatomy and Histology

Course Specifications of Anatomy and Embryology in Master degree of General Surgery

University: Minia

Faculty: Medicine

Department: Anatomy

1. Course Information

- **Academic Year/level:** first part
- **Course Title:** Course Specifications of Anatomy and Embrylogy in Master degree in **surgery**
- **Number of teaching hours:**

- **Lectures:** Total of 24 hours
- **Practical/clinical**: Total of 9 hours

2. Overall Aims of the course

By the end of the course the student must be able to:

to have the have the professional knowledge anatomy and embryology of internal body systems.

3. Intended learning outcomes of course (ILOs):

Upon completion of the course, the student should be able to:

A- Knowledge and Understanding	A1. Mention the normal structure and function of the body systems on the macro levels. A2. Understand early embryo development & normal growth and development of the different body systems. A3. List the recent advances in the abnormal structure, function, growth and development of, GIT, cardiovascular,

	respiratory and urinary system. A4. Demonstrate the anatomical basis of surface anatomy and radiologic anatomy
B- Intellectual Skills	B1. Link between knowledge for Professional problems solving. B2. Conduct research study and / or write a scientific study on a research problem. B3. Diagnosis of diseases based on anatomical disruptions. B4. Establish goals to improve performance in the field of surgery
C- Professional and Practical Skills	C1. Master the basic and modern medical skills in the area of internal medicine. C2. Description of diseases and anomalies based on anatomical data.
D- General and transferable Skills	d1. Communicate effectively by all types of effective communication. d2. Use information technology to serve the development of professional practice. d3. Assess the candidate himself and identify personal learning needs. d4. Use different sources to obtain information and knowledge d5. Assess the performance of others

4. Course Contents

Topic	Lecture	Practical/Clinical	Total No. of hours

	hours/week	hours/week	hours/week
Anatomy of GIT system (alimentary tract and digestive organs)	4	2	6
Normal and abnormal development of the digestive tract, liver and pancreas.	4	2	6
Surgical anatomy of abdomen, pelvis, abdominal planes and hernia.	2	1	3
Anatomy and development of peritoneum and peritoneal spaces.	2	1	3
Abdominal wall anatomy and development, inguinal canal and femoral sheath.	2	1	3
Urinary system anatomy and development.	3	-	3
Autonomic supply and lymphatic drainage of abdominal and pelvic organs.	3	-	3
Anatomy of perineal pouches and ischeorectal fossa.	2	-	2
Revision	2	2	4
Total	24	9	33

5. Teaching and Learning Methods	1 - Lectures. 2 - Practical lessons. 3- Assignments for the students to empower and assess the general and transferable skills
6. Teaching and Learning Methods for students with limited Capacity	

7. Student Assessment

A. Student Assessment Methods	1- Assignments for the students to empower and assess the general and transferable skills 2- Periodic written exam to assess Knowledge, understanding and Intellectual skills. 3- Periodic practical+ written examination to assess practical skills as well as Knowledge. 4- Final written exam to assess Knowledge, understanding and intellectual skills. 5- Final oral exam to assess understanding and intellectual skills. 6- Final practical exam to assess practical skills.
B. Assessment Schedule (Timing of Each Method of Assessment)	Assessment 1… Periodic 1… Week: 10-13 Assessment 2 … Assignment…. Week: 15-16 Assessment 3….periodic. 2…. Week …18-20 Assessment 2 …Final practical exam Week: 26-28 Assessment 3…. Final written exam. Week …26-28 Assessment 4…..Final oral exam Week….26-28
C. Weighting of Each Method of Assessment	Periodic Examinations 20 % including: Assignment: 5%

Periodic 1: 5%

Periodic. 2: 10%

Final-term Examination 50%

Oral Examination. 20%

Practical Examination 10 %

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Total 100%

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8. List of References:

- **Standring,S, Ellis, H., Healy, J.C., Johnson, D., and Williams, J.C., 2016. Gray's anatomy. 50th edition.**
- **Junqueira, L.C. and Carneiro, J., 2015. Basic histology. 10th edition.**
- **Moore K.L., and Agur A.M.R., 2016. Essential clinical anatomy. 14th edition.**

A. Course Notes/handouts	Lecture notes prepared by staff members in the department.
B. Essential Books	Gray's Anatomy.
C. Recommended Text Books	A colored Atlas of Human anatomy and Embryology.
D. Periodicals, websites	American J. of Anatomy
	Cochrane Library,Medline & Popline

Course Coordinator/s:

Dr. Abdel- Hamid Abobakr

Head of Department:

Prof. Dr. Fatma Alzahraa Fouad Abdel- Baky

Date of <u>last update</u> & approval by department Council: 2023

جامعة/أكاديمية : المنيا

كلية / معهد: الطب

قسم: التشريح

مسمى المقرر	التشريح
كود المقرر	GS 200

A. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	Week No.	Intended Learning Outcomes (ILOs)			
		A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
		A	B	C	D
Anatomy of GIT system (alimentary tract and digestive organs)	1	1,2,3,4	1,2	1	1,3,5
Normal and abnormal development of the digestive tract, liver and pancreas.	2	2,3	2	2	2,4
Surgical anatomy of abdomen, pelvis, abdominal planes and hernia.	3	3,4	2,3	1,2	3,4
Anatomy and development of peritoneum and peritoneal spaces.	4	1,4	1,4	1,2	4,5
Abdominal wall anatomy and development, inguinal canal and femoral sheath.	5	2,4	1,2	1	1,2,5
Urinary system anatomy and development.	6	2,3	2	2	2,4
Autonomic supply and lymphatic drainage of abdominal and	7	1,4	1,4	1,2	4,5

pelvic organs.					
Anatomy of perineal pouches and ischeorectal fossa.	**8**	**2,4**	**1,2**	**1**	**1,2,5**
Revision	**9**	**1,2,4**	**1,2**	**1**	**1,3,5**

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	1,2,3,4	1,2	1	1,3,5
Practical	2,3	2	2	2,4
Clinical (Including grand rounds)	3,4	2,3	1,2	3,4
Presentation/seminar	1,4	1,4	1,2	4,5
Journal club	2,4	1,2	1	1,2,5
Thesis discussion	4	4	1	1,3,5
Training courses & workshops	3,4	1,4	1,2	2,4

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	1,2,3,4	1,2	1	1,3,5
Practical exam	2,3	2	2	2,4
Clinical exam	3,4	2,3	1,2	3,4
Oral Exam	1,2,3,4	1,2,4	1,2	4,5
Assignment	2,4	1,2	1	1,2,5

نموذج رقم (١٢)

Course Specifications of Histology for master's degree (1st part) in general surgery

University: Minia

Faculty: Medicine

Department: Histology and cell biology department.

9. Course Information		
Academic Year/level: master's degree (1st part) in general surgery •	Course Title: Histology and cell biology	• **Code**:
Number of teaching hours: 70 **Lectures:** Total of 24 hours . 1h/week **Practical:** Total of 46 hours 2h\week		
10. Overall Aims of the course	*By the end of the course the student must be able to:* 1. Provide the postgraduate students with the medical Knowledge and skills essential for the practice of specialty and necessary to gain. 2. Provide master students with basic information about the structure and function of different tissues and organs affected in many diseases. 3. Maintenance of learning abilities necessary for continuous medical education. 4. Maintenance of research interest and competences.	
11. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***		
E- Knowledge and Understanding	A1. Define the histological structure of body tissues and organs A2. List the structure and function of the different cells and organs. A3. List the basic abnormalities that might affect the tissue as a result of diseases A4. To identify the ability of different tissue to regenerate following the treatment of diseased condition.	

F- Intellectual Skills	B1. Interpret histological changes in diseases compared to the normal histology
G- Professional and Practical Skills	C1. Teamwork, practicing and participation in scientific activities. C2. Master the basic and modern medical skills in the area of specialty. C3. Examine histological slides and identify the structure of different cells and organs.
H- General and transferable Skills	D1. Practice in groups, as a leader or as a colleague. D2. Use the advanced biomedical information to remain current with advances in knowledge and practice (self-learning). D3. Play role in the medical progress by having advanced medical information. D4. Be aware about the presentation skills through the attendance and participation in scientific activities.

12.Course Contents

Topic	Lecture hours/week	Practical/Clinical hours/week	Total No. of hours/topic
Introduction	1	-	1
Epithelial tissue1	1	2	3
Epithelial tissue2	1	2	3
Epithelial tissue3	1	2	3
Connective tissue.1	1	2	3
Connective tissue2	1	2	3
Muscular tissue1	1	2	3
Muscular tissue2	1	2	3
Muscular tissue3	1	2	3
Nervous tissue1	1	2	3
Nervous tissue2	1	2	3
Nervous tissue3	1	2	3
Blood & haemopoietic1	1	2	3
Blood & haemopoietic2	1	2	3
Blood & haemopoietic3	1	2	3
Cardiovascular system1	1	2	3
Cardiovascular system2	1	2	3
Lymphatic & immune system 1	1	2	3
Lymphatic & immune system2	1	2	3
Endocrine system:1	1	2	3
Endocrine system:2	1	2	3

Endocrine system:3	1	2	3
Digestive system1	1	2	3
Digestive system2	1	2	3
Total	24	46	70

Teaching and Learning Methods .5	● Lectures & group discussions. ● Assignments and practical activities. ● Attending and participating in scientific conferences and workshops to acquire the general and transferable skills needed
6. Teaching and Learning Methods for students with limited Capacity	
7. Student Assessment	
A. Student Assessment Methods	● Written exam to assess capability of students to assimilate and applicate knowledge included in the course. ● Oral exam to assess the student intellectual and communication abilities regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the percentage of achievement of the intended learning outcome of the course.
B. Assessment Schedule (Timing of Each Method of Assessment)	**Assessment 1:** written exams by the end of the course. **Assessment 2:** Oral exam, after the written exam. **Formative only assessment:** simple research assignment, logbook, slide box.
C. Weighting of Each Method of Assessment	Written exam 20 40% Oral exam 30 60% Total 50 100%
8. List of References	
A. Course Notes/handouts	Notes of department and practical notebook
B. Essential Books	1. Basic histology, Junqueira et al. 2. Bloom and Fawcett: Concise Histology. 3. Fawcett., Cell biology and histology. Gartner et al. 4. Lippincott Illustrated review: integrated

	systems 5. Oxford Handbook of Medical sciences
C. Recommended Textbooks	11. Wheater's Functional Histology A Text and Colour Atlas. 7th Edition - April 3, 2023. 2. Stevens & Lowe's Human Histology (Fourth Edition) Book. 4th Edition. 2015.
D. Periodicals, websites	**Web Sites:** To be determined and update during the course work. 1. http://www.histology-world.com. 2. http://histo.life.illinois.edu/histo/atlas/slides.php **Periodicals:** 1. Journal of molecular histology 2. Egyptian J of Histology 3. Egyptian J of Anatomy 4. Acta Anatomica 5. International J of Experimental Research 6. Cell and Tissue Research

Course Coordinator/s:

1-Assisstant prof. Soha Abel Kawy

2- Assistant Lecturer: Reham Abo El-Leil

Head of Department:

Prof. Dr. **Seham Abd El-Raouf Abd El-Aleem**

Date of last update & approval by department Council: March / 2023

نموذج رقم (١١أ)

General surgery	**مسمى المقرر**
HIS200b HIS200c	**كود المقرر**

جامعة/أكاديمية : .....المنيا.....

كلية / معهد: .....الطب.....

قسم: .....هستولوجي.....

A. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	**Week No.**	**Intended Learning Outcomes (ILOs)**			
		A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
		A	**B**	**C**	**D**
Introduction	1	A1			
Epithelial tissue1	2	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Epithelial tissue2	3	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Epithelial tissue3	4	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Connective tissue.1	5	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Connective tissue2	6	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Muscular tissue1	7	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Muscular tissue2	8	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Muscular tissue3	9	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Nervous tissue1	10	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4

Nervous tissue2	11	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Nervous tissue3	12	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Blood & haemopoietic1	13	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Blood & haemopoietic2	14	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Blood & haemopoietic3	15	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Cardiovascular system1 -.	16	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Cardiovascular system2	17	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Lymphatic & immune system 1	18	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Lymphatic & immune system2	19	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Endocrine system:1	20	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Endocrine system:2	21	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Endocrine system:3	22	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Digestive system1	23	A1,A2,A3,A4	B1		
Digestive system2	24	A1,A2,A3,A4	B1		

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
Lecture	A1,A2,A3,A4	B1		
Practical			C1,C2,C3	
Presentation/seminar Training courses & workshops	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4

C.Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General &Transferable Skills
	A	B	C	D
Written exam	A1,A2,A3,A4	B1	-	-
Oral Exam	A1,A2,A3,A4	B1	-	-

Blueprint of Histology and cell biology department for candidates of master degree "first part" examination paper (20 marks)

	Topic	Hours	Knowledge %	Intellectual %	% of topic	Marks
1	**Introduction**	1	100	-	4.16	-
	Epithelium	3	80	20	12.5	2.5
2	**Connective tissue proper**	2	80	20	8.3	2
3	**Muscle**	3	80	20	12.5	2,5
4	**Nervous**	3	80	20	12.5	2.5
5	**Blood**	3	80	20	12.5	2.5
6	**Cardiovascular system**	2	80	20	12.5	2
8	**Lymphatic system**	2	80	20	8.3	2
10	**Endocrine**	2	80	20	8.3	2
11	**Digestive**	2	80	20	8.3	2
	Total	24			100%	20

Course (٢) Physiology and Biochemistry

Medical Physiology Course Specifications

For 1st Part Master (MSc) Degree in GENERAL SURGERY (GS 200)

University: Minia

Faculty: Medicine

Faculty offering the program: Faculty of Medicine.

Department offering the course: Medical Physiology Department.

Program(s), on which the course in given: MSc Degree in **GENERAL SURGERY.**

Major or minor element of program(s): Medical Physiology.

Academic year/level: 1st part **MSc** degree in **GENERAL SURGERY.**

Date of last update & approval: 2022-2023

Basic Information

Title: Physiology course specifications for 1st part MSC degree of **GENERAL SURGERY**

Code: GS200 **Credit Hours:** Not applicable

Lectures: 16.5 hours (1.5 hours / week)

Tutorial/Practical: Not applicable

Professional information

1) OVERALL AIM OF COURSE:

The aim of the course are to provide the postgraduate students with knowledge about the physiological principles underlying the specialty of **GENERAL SURGERY** that aid in interpretation of symptoms, investigations and management of related disorders.

INTENDED LEARNING OUTCOMES OF COURSE (ILOS)

A. Knowledge and Understanding:

By the end of the course, the student should be able to:

A1. Describe the Physiology of (Blood);

1.1. General composition & functions of blood components.

1.2. Erythropoiesis (mechanism, factors affecting & disorders).

1.3. WBCs & Blood defense.

1.4. Blood platelets, Hemostasis & common disorders.

A2. Discuss the Physiology of Autonomic Nervous System (ANS);

2.1. Distribution; function and common disorders of ANS.

2.2. Chemical transmission in ANS.

A3. Describe the Physiology of Central Nervous System (CNS);

3.1. Physiology of Pain (definition, types, body reactions & control).

A4. Discuss the Physiology of Cardiovascular System (CVS);

4.1. Arterial blood pressure (APB); Hemorrhage & Shock.

A5. Recognize the Physiological basis of Metabolism;

5.1 Body temperature regulation & fever.

A6. Recognize the Physiology of Respiratory System;

6.1. Control of Respiration; Hypoxia & Cyanosis.

A7. Discuss the Physiology of Gastrointestinal (GIT) System;

7.1. Gastrointestinal secretions

7.2. Gastrointestinal hormones

7.3. Gastrointestinal motility

7.4. Stomach & Pancreas

7.5. Liver; Gall bladder; Bile & Jaundice

7.6. Disorders related to gastrointestinal system

A8. Discuss the Physiology of Endocrinal System;

8.1. Thyroid gland.

8.2. Parathyroid gland & calcium homeostasis.

8.3. Adrenal gland.

8.4. Islets of Langerhans of pancreas & glucose homeostasis.

B. Intellectual Skills:

By the end of the course, the student should be able to:

B1. Develop the skills for demonstrating different functions of the body systems related to general surgery to diagnose deviation from normality as detected disease state.

B2. Assess the problems associated with different factors, which affect the normal function of different body systems related to general surgery.

C. Practical Skills:

Practical hours: -

D. General and Transferable Skills:

By the end of the course, the student should be able to:

D1. Adopt the principles of lifelong learning.

D2. Prepare and present clearly and effectively a scientific topic in a tutorial, a staff meeting or the yearly scientific day.

D3. Work efficiently within a team, honor and respect his colleagues.

Curriculum structure & contents:

Topic:	**No. of Lectures**	**Total no. of hours**
1. Physiology of Blood:		
• General composition & functions of blood components.	**2**	**4**
• Erythropoiesis & anaemia.		
• WBCs & Blood defence.		
• Blood platelets, Haemostasis & common disorders.		
2. Physiology of ANS:		
• Distribution; function and common disorders of ANS.	**1**	**2**
• Chemical transmission in ANS.		
3. Physiology of Central Nervous System (CNS):		
• Physiology of Pain; definition, types, body reactions & control.	**1**	**2**
4. Physiology of Cardiovascular System (CVS):		
• Arterial blood pressure (APB); Haemorrhage & Shock.	**1**	**2**
5. Physiological basis of Metabolism:		
• Body temperature regulation & fever.	**1**	**2**
6. Respiratory system:		
• Control of Respiration; Hypoxia & Cyanosis.		
7. Gastrointestinal system:		
• Gastrointestinal secretions	**1**	**2**
• Gastrointestinal hormones		
• Gastrointestinal motility		
• Stomach & Pancreas		
• Liver; Gall bladder; Bile & Jaundice	**3**	**6**
• Disorders related to gastrointestinal system		

8. Endocrine system: • Thyroid gland • Parathyroid gland & calcium homeostasis • Adrenal gland. • Islets of Langerhans of pancreas & glucose homeostasis	**2**	**4**
Total	**12**	**24**

TEACHING AND LEARNING METHODS:

1. Lectures (2hr/wk.) throughout the academic year interchangeable with recorded lectures.
2. Self-learning activities such as use of internet and multimedia.

STUDENT ASSESSMENT METHODS:

1. **Written exam** to assess the student's knowledge in the form of short essay questions and /or MCQs.
2. **Oral exam** to assess student's knowledge, intellectual and general skills as well as assessing the verbal communication abilities.
3. **Log book.**

Assessment Schedule:

- **Assessment 1:** Final written exam (1 hour).
- **Assessment 2:** Final oral exam.

Weighting of assessment:

- **Final written exam** **16** marks (40%)
- **Final oral exam** **24** marks (60%)
- **Total** **40** marks (100%)

LIST OF REFERENCES:

1. **Department books and notes.**

Prepared by Medical Physiology Department staff members, Faculty of Medicine, Minia University.

2. **Essential books (Text Books):**
    - Ganong review of medical physiology.
    - Guyton text book of medical physiology.
3. **Periodicals, Web sites… etc.**

FACILITIES REQUIRED FOR TEACHING AND LEARNING:

1. Classrooms with data show for lectures.
2. Computers and internet facilities.

Course Coordinator,

Prof. Dr. Walaa Hassan Nazmy

Prof. of Medical Physiology

Faculty of Medicine, Minia University

Head of Medical Physiology Department,

Prof. Dr. Merhan Mamdouh Ragy

Prof. & Head of Medical Physiology Department

Faculty of Medicine, Minia University

جامعة: المنيا

كلية : الطب البشري

قسم: الفسيولوجيا الطبية

Physiology course specifications for **1st Part MSc degree in General Surgery**	**مسمى المقرر**
GS200	**كود المقرر**

A. Matrix of Coverage of Course ILOs by Contents

Contents	**Intended Learning Outcomes ILOs**																								
	A. Knowledge & Understanding																				**B. Intellectual skills**		**D. General & Transferable Skills**		
	A 1. 1	**A 1. 2**	**A 1. 3**	**A 1. 4**	**A 2. 1**	**A 2. 2**	**A 3. 1**	**A 4. 1**	**A 5. 1**	**A 6. 1**	**A 7. 1**	**A 7. 2**	**A 7. 3**	**A 7. 4**	**A 7. 5**	**A 7. 6**	**A 8. 1**	**A 8. 2**	**A 8. 3**	**A 8. 4**	**B 1**	**B 2**	**D 1**	**D 2**	**D 3**
1. Physiology of Blood	X	X	X	X																	X	X	X	X	X
2. Autonomic Nervous System					X	X															X	X	X	X	X
3. Central Nervous System							X														X	X	X	X	X
4. Cardiovascular System								X													X	X	X	X	X
5. Physiology of Metabolism									X												X	X	X	X	X
6. Respiratory System										X											X	X	X	X	X
7. Gastrointestinal (GIT) System											X	X	X	X	X	X					X	X	X	X	X
8. Endocrine System																	X	X	X	X	X	X	X	X	X

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Lectures	X	X	-	X
Self-learning activities	X	X	-	X

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Written exam	X	X	-	-
Oral Exam	X	X	-	X
Log Book	X	X	-	X

Course Coordinator,
Prof. Dr. Walaa Hassan Nazmy
Prof. of Medical Physiology
Faculty of Medicine, Minia University

Head of Medical Physiology Department,
Prof. Dr. Merhan Mamdouh Ragy
Prof. & Head of Medical Physiology Department
Faculty of Medicine, Minia University

Date of Last update & approval 2022-2023

Medical Biochemistry course specification for master degree in General Surgery (First part)

University: *Minia*

Faculty: *Medicine*

Department: Medical Biochemistry

Last date of approval 3\2023

<table>
<tr><td colspan="3">1. Course Information</td></tr>
<tr><td>Academic Year/level: First Part of Master Degree</td><td>• Course Title:
First Part of Master Degree in General Surgery</td><td>Code:</td></tr>
<tr><td colspan="3">• Number of teaching hours:
Lectures: 30 hours; 1.5 hours/week
Practical: 16 hours; 2 hours / 2 week</td></tr>
<tr><td>2. Overall Aims of the course</td><td colspan="2">By the end of the course the student must be able to:
1. Provide the postgraduate student with the medical Knowledge and skills essential for the practice of specialty and necessary to gain.
2-To understand all molecular basics and diseases.
3-To know different molecular techniques and their advanced applications.
4-To better understand and use the research tools including internet and different laboratory equipment.
5-To know retrieving the literature and understanding the evidence-based medicine
6-Maintain learning abilities necessary for continuous medical education.
7-Maintain research interest and abilities.</td></tr>
<tr><td colspan="3">3. Intended learning outcomes of course (ILOs):
Upon completion of the course, the student should be able to:</td></tr>
<tr><td>A- Knowledge and Understanding</td><td colspan="2">The student finishes the course; he will be able to achieve the following objectives:
A1. Illustrate various metabolic processes of carbohydrate, lipid and protein
A2. Describe role of minerals and hormones and Vitamins in metabolism.
A3. Interpret Various metabolic diseases and their diagnosis
A4. List the role of enzymes in the chemical reactions in the body and its diagnostic importance.
A5. Discuss types of gene therapy and its therapeutic effect.
A.6. Describe the metabolism of hemoglobin and nucleic acids.</td></tr>
</table>

	A.7- Explain xenobiotics and their detoxification. A8- Explain principles, methodologies, tools and ethics of scientific research.
B- Intellectual Skills	B1-Develop the skills for analysis of different diseases to reach a final diagnosis. B2-Develop the ability to solve problems associated with metabolic diseases. B3-Develop the ability to integrate metabolic pathways with diseases.
C- Professional and Practical Skills	After completing the course, the student should be able to C1. Organize groups, as a leader or as a colleague. C2. Practice willingly the presentation skills through the attendance and participation in scientific activities.
D- General and transferable Skills	After completing the course, the student should be able to D1. Be aware of the advanced biomedical information to remain current with advances in knowledge and practice (self-learning). D2. Prepare for medical progress by having advanced medical research studies

4- Course Contents

Topic	**Lecture hours**	**Practical/Clinical hours**	**Total No. of hours**
1. Carbohydrate Metabolism	6	4	10
2. Lipid metabolism	6	2	8
3. Protein metabolism	3	2	5
4. Purines and pyrimidine Metabolism	1.5	---	1.5
5. Enzymes	1.5	2	3.5
6. Minerals	3	---	3
7. Hormones	1.5	2	3.5
8. Vitamins	3	---	3
9. Gene Therapy	1.5	2	3.5
10. Xenobiotics	1.5	---	1.5

11. Hemoglobin metabolism	1.5	2	3.5
Total	**30**	**16**	**46**
5-Teaching and Learning Methods	1-Lectures & discussions. 2-Assignments 3-Attending and participating in scientific conferences and workshops to acquire the general and transferable skills needed		
6-Teaching and Learning Methods for students with limited Capacity	Additional lectures, adjusting time and place of lectures according to their schedule and capacity		
7- Student Assessment			
A-Student Assessment Methods	**1- Written exam** to assess the capability of the student for assimilation and application of the knowledge included in the course. **2-Oral exam** to assess the student intellectual and communication skills regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the % of achievement of the intended learning outcomes of the course		
B-Assessment Schedule (Timing of Each Method of Assessment)	***Assessment 1: one written exam*** *by the end of the course* **Assessment 2: *Oral exam,*** *after the written exam* **Formative only assessment:** log book.		
C-Weighting of Each Method of Assessment	**Written examination:** 8 marks **Oral examination**: 12 marks **Total**: 20 marks		
8- List of References			
A-Course Notes/handouts	Lectures notes are prepared in the form of a book authorized by the department.		

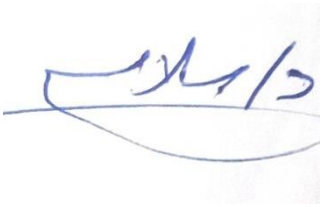
B-Essential Books	-Harper's Biochemistry, Robert K. Murray, Daryl K. Granner, PeterA.Mayes, and VictorW. Rodwell (32th edition, 2022)
C- Recommended Text Books	a. Lubert Stryer, Biochemistry (9 th edition, 2019) b. Lehninger, Biochemistry (8th edition, 2021) c. Lippincott, Biochemistry (7th edition, 2017)
D-Periodicals, websites	To be determined and updated during the course work. **Websites:** 1-http://www.Medical Biochemistry.com. **Periodicals:** 1- International journal of biochemistry 2- Science Direct

Course Coordinator/s:

Dr. Heba Marey

Head of Department:

Prof. Dr. Salama Rabie Abd El Rahiem



Date of <u>last update</u> & approval by department Council:

3 / 2023

مسمى المقرر	جزء اول ماجستير الجراحة
كود المقرر	GS 200

جامعة/أكاديمية : ..المنيا**.....**

كلية / معهد**..... :**الطب.....

قسم : **الكيمياء الحيويه**

A. Matrix of Coverage of Course ILOs By Contents

Contents **(List of course topics)**	**Week No.**	**Intended Learning Outcomes (ILOs)**			
		A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
		A	**B**	**C**	**D**
1. Carbohydrate Metabolism	**1**	**A1 A3 A4**	**B3**	**C2**	
2. Lipid metabolism	**2**	**A1 A3 A4**	**B2 B3**	**C2**	
3. Protein metabolism	**3**	**A1 A3 A4**	**B1 B2 B3**	**C1 C2**	
4. Purines and pyrimidine metabolism	**4**	**A3 A6**	**B1**	**C1**	
5. Enzymes	**5**	**A4**	**B2**		
6. Minerals	**6**	**A2 A3**	**B1**	**C1**	

7. Hormones	**7**	**A2 A3**	**B3**	**C2**	
8. vitamins	**8**	**A2 A3**	**B1**	**C2**	
9. Gene Therapy	**9**	**A5**	**B1 B3**		
10. Xenobiotics	**10**	**A7**	**B3**	**C1**	
11. Hemoglobin metabolism	**11**	**A3 A6**	**B2**	**C2**	

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1 A2 A3 A4 A5 A6	B2 B3		
Practical			C1 C2	
Presentation/seminar				D1 D2
Journal club				D1 D2
Training courses & workshops				D1 D2
Other/s (Specify)		B3 B1	C1 C2	D1 D2

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1 A2 A3 A4 A5 A6 A7 A8	B1 B2 B3		
Oral Exam	A1 A2 A3 A4 A5 A6 A7	B2 B3	C1 C2	
Assignment				D1 D2
Other/s(Specify)		B1 B2	C2	D2

Blueprint of Medical Biochemistry Department Blueprint of Examination Paper

(8 marks)

	Topic	**Hours**	**Knowledge %**	**Intellectual %**	**% of topic**	**No of items per topic**	**Knowledge**		**Intellectual**		**Marks**	**Actual mark**
							No of Items	*Mark*	*No of Items*	*Mark*		
1	**Carbohydrate metabolism**	6	70	30	**20**	2	1	0.8	1	0.8	**1.6**	**1.5**
2	**Lipid metabolism**	6	75	25	**20**	2	1	0.8	1	0.8	**1.6**	**1.5**
3	**Protein metabolism**	3	75	25	**10**	2	1	0.4	1	0.4	**0.8**	**1**
4	**Purine and pyrimidine metabolism**	1.5	75	25	**5**	2	1	0.2	1	0.2	**0.4**	**0.5**
5	**Enzymes**	1.5	70	30	**5**	2	1	0.2	1	0.2	**0.4**	**0.5**
6	**vitamins**	3	80	20	**10**	2	1	0.4	1	0.4	**0.8**	**0.5**
7	**hormones**	1.5	75	25	**5**	2	1	0.2	1	0.2	**0.4**	**0.5**
8	**Minerals**	3	75	25	**10**	2	1	0.4	1	0.4	**0.8**	**0.5**
9	**Xenobiotic**	1.5	70	30	**5**	2	1	0.2	1	0.2	**0.4**	**0.5**
10	**Gene Therapy**	1.5	75	25	**5**	2	1	0.2	1	0.2	**0.4**	**0.5**
11	**Hemoglobin metabolism**	1.5	70	30	**5**	2	1	0.2	1	0.2	**0.4**	**0.5**
	Total	**30**			**100 %**						**8**	**8**

Course (3) Pathology

Course Specifications of Pathology 1st Part of Master Program of General Surgery

2022-2023

University: Minia

Faculty: Medicine

Department responsible for offering the course: Pathology

Program on which the course is given: MSC of General Surgery

<table>
<tr><td colspan="3">4. Course Information</td></tr>
<tr><td>• Academic Year/level: 1st part of MSC in General surgery</td><td>• Course Title:
Pathology.</td><td>• Code: GS 200</td></tr>
<tr><td colspan="3">• Number of teaching hours:
- Lectures: Total of 46 hours; 2 hour/week
- Practical/clinical: Total of 22 hrs., 2 hour/week</td></tr>
<tr><td>5. Overall Aims of the course</td><td colspan="2">By the end of the course the student must be able to:
1. Explain theories, basics & recent advances in the field of surgical pathology.
2. Appraise & interpret relevant basic information and correlate them with essential clinical data to reach a final diagnosis
3. Demonstrate competency on dealing with various biopsies and interpreting pathological reports and correlate such information with the relevant provided</td></tr>
</table>

	clinical data. 4. Learn the basic issues related to safety and maintain available resources. 5. Communicate efficiently with senior staff, colleagues in the same & other departments as well as lab technical staff, other health care professionals, students, and patients. 6. Use efficiently the information technology including data entry & analysis to enhance data management and to achieve improvement of the professional practice 7. Manage time efficiently and learn to priorities tasks 8. Show the skills of continuous & self-learning.
6. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***	
E- Knowledge and understanding	A1. Explain theories, basics & recent advances principally: natural history, etiology (especially those related to the environment), pathogenesis, pathological changes, structural and functional changes, clinical manifestations, fate and complications of common and important diseases in different body systems mainly GIT, lymphopoietic, hepatobiliary, endocrine and breast A2. Outline the basics of genetics, immunopathology, environmental & nutritional issues in different common & important diseases. A3. Identify the mutual effects of the environment & the professional practice and the impact of such practice on the welfare of the society A4. Identify the basic medico-legal principles that should be applied in the practice of autopsy A5. Outline the standards of quality assurance to ensure good practice as a profession.

F- Intellectual Skills	B1. Correlate & evaluate the gross and microscopic features of surgical specimens with available clinical data to provide a list of differential diagnosis for further advanced investigations to reach the correct diagnosis. B2. Evaluate and control efficiently potential risks that may arise during the professional practice in various clinical situations like handling and processing of specimens
G- Professional and Practical Skills	C1. Demonstrate competency on dealing with and reporting gross features of different biopsies & surgical specimens and supplying all essential clinical data C2. Ensure proper preservation of surgical specimens and biopsies and select the suitable preservatives with stickiness to quality & safety procedures. C3. Apply relevant issues related to safety and ensure keeping available resources while dealing with biopsies and surgical specimens and all essential materials and equipment.
H- General and transferable Skills	D1. Demonstrate efficient communication & interpersonal skills in all its forms and in different situations that may involve senior staff, colleagues, students, lab technical staff, other health care professionals, and patients D.2. Use efficiently the information technology and select reliable sources of information to get essential information and updates regarding the different topics in surgical pathology. D.3. Develop skills of self-evaluation and identify personal learning needs to plan for self-development and continuous medical education D.4. Demonstrate the skills of effective time management.

7. Course Contents

Topic	**Lecture** **2hours/week**	**Practical/Clinical** **2hours/week**	**Total No. of hours** **hours/week**
GENERAL & Systemic			

PATHOLOGY			
1. Cell injury and cell death	4	2	
2. Inflammation	4	2	
3. Bacterial infection	2	-	
4. Immunopathology	2	-	
5. Granulomas	4	2	
6. Repair	2	2	
7. Circulatory disturbances	4	2	
8. Disturbances of cell growth and adaptation	2	2	
9. Neoplasia	4	2	
10. Lymphopoietic system	4	2	
11. Diseases of the GIT & hepatobiliary system	6	2	
12. Endocrine diseases	4	2	
13. Diseases of the breast	4	2	
Total	46	22	
9. Teaching and Learning Methods	٥.1. Lectures: Both face to face & on-line ones. 5.2. Practical lessons: Gross pathology and interpretation of pathology reports 5.3. Self-directed learning (SDL) 5.4. Journal club, Case presentation, Seminars.		
10. Teaching and Learning Methods for students with limited Capacity	Not applicable		

11. **Student Assessment**	
D. Student Assessment Methods	**1. Written exam** to assess the acquired knowledge & understanding as well as intellectual skills and essential professional skills. 2. **Oral exam** to assess the student intellectual and communication skills regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the % of achievement of the intended learning outcomes of the course.
E. Assessment Schedule (Timing of Each Method of Assessment)	• **Assessment 1: written exam** by the end of course. • **Assessment 2: Oral exam,** after the written exam.
F. Weighting of Each Method of Assessment	**Type of Assessment** **Marks %** • **Written** examination ١٥ (40 %) • **Oral** examination. ٢2.5 (60 %) **Total** 37.5 (100%)
12. List of References	
E. Course Notes/handouts	1- General pathology course notes prepared by the department staff and 2- Lectures' Handouts & printed material of recorded ones.
F. Essential Books	1- Goldblum, John R., et al. Rosai and

	Ackerman's Surgical Pathology E-Book. Elsevier Health Sciences (2017). 2- Kumar, V., Abbas, A. K., & Aster, J. C. Robbins basic pathology e-book. Elsevier Health Sciences (2017).
G. Recommended Text Books	1- Liang Jing & David Bostwick. Essentials of anatomic pathology (2011). 2- Diana W Molavi. The practice of surgical pathology; A beginners guide to the diagnostic process (2008).
H. Periodicals, websites	To be determined and updated during the course 1-American Journal of pathology 2-The Journal of pathology 3-Diagnostic Histopathology 4-Cancer 5-www.pubmed.com 6-www.pathmax.com

Course Coordinator/s:

- Assistant Prof. Dr. Manal Ismail Abd-Elghany

Head of Department:

Prof. Dr. Heba Mohamed Tawfik.

Date of last update & approval by department Council: / 3/ 2023

نموذج رقم (١١أ)

Pathology	**مسمى المقرر**
GS 200	**كود البرنامج**

جامعة/أكاديمية : .....جامعة.المنيا.....

كلية / معهد: .....كلية الطب.....

برنامج: ماجستير الجراحة العامة

قسم: .....الباثولوجي.....

A.Matrix of Coverage of Course ILOs By Course Contents & activities

Contents	**Intended Learning Outcomes (ILOs)**													
	A. Knowledge & understanding					**B. Intellectual Skills**		**C. Professional & Practical skills**			**D. General & Transferable Skills**			
	A 1	**A 2**	**A 3**	**A 4**	**A 5**	**B1**	**B2**	**C 1**	**C 2**	**C 3**	**D 1**	**D 2**	**D 3**	**D 4**
I. GENERAL & SYSTEMIC PATHOLOGY TOPICS														
1. Introduction & Inflammation	**x**				**x**	**x**	**x**				**x**			
2. Cell injury and cell death	**x**				**x**	**x**	**x**				**x**			
3. Inflammation	**x**				**x**	**x**	**x**				**x**			
4. Bacterial infection	**x**				**x**	**x**	**x**				**x**			
5. Immunopathology	**x**				**x**	**x**	**x**				**x**			
Granulomas	**x**				**x**	**x**	**x**				**x**			

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6. Repair	**x**				**x**	**x**	**x**				**x**			
7. Circulatory disturbances	**x**				**x**	**x**	**x**				**x**			
8. Disturbances of cell growth and adaptation	**x**				**x**	**x**	**x**				**x**			
9. Neoplasia	**x**				**x**	**x**	**x**				**x**			
10. Lymphopoietic system	**x**	**x**	**x**	**x**	**x**	**x**	**x**				**x**			
11. Diseases of the GIT & hepatobiliary system	**x**	**x**	**x**	**x**	**x**	**x**	**x**				**x**			
12. Endocrine diseases	**x**	**x**	**x**	**x**	**x**	**x**	**x**				**x**			
13. Diseases of the breast	**x**	**x**	**x**	**x**	**x**	**x**	**x**				**x**			
III. Scientific activities (Journal club, Case presentation, Seminars).	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**

B.Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
Lecture	x	x		
Practical			x	
Presentation/seminar			x	x
Journal club	x	x		x

C.Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
Written exam	x	x		
Oral Exam	x	x		x

Course (4): Microbiology

Course Specifications of Medical Microbiology and Immunology for General surgery master program (GS200)

University: Minia

Faculty: Medicine

Department: Medical Microbiology and Immunology

1. Course Information		
Academic Year/level: postgraduate students	**Course Title:** Medical Microbiology and Immunology for General surgery postgraduate students.	**Code**: **GS200**
- **Number of teaching hours:** - **Lectures:** Total of 40 hours; 2 hours/week - **Practical**/clinical: Total of 5 hours; 1 hours/week		
1.Overall Aims of the course	By the end of the course the student must be able to: 1. Know the different types of pathogens, their structure and pathogenesis 1. Know the different methods for laboratory diagnosis and control of different infectious agents. 3. Know the different molecular microbiological techniques and their applications. 4. Know the basics of the host-parasite relationships and the role of the immune system in defending the body against	

	different pathogens and its role in health and disease. 5. Know the principles of biosafety measures and aseptic precautions.
3.Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***	
A-Knowledge and Understanding	A1. Know microbial morphology, structure, metabolism and physiology of medically significant microorganisms A2. Understand the basis of microbial genetics and biotechnology techniques and their applications. A3. Recognize the taxonomy and classification of different microorganisms. A4. Identify the natural habitat, source of infection and mode of transmission of the different classes of pathogens causing postoperative infections. A5. Identify the different levels of host-parasite relationship and recognize the microbial virulence factors A6. Recognize the role of the immune system in the health and disease of the human being. A7. Know the causes, sources, mode of transmission and treatment of nosocomial infections and know the different methods for infection control in operative rooms.
B-Intellectual Skills	B1. analyze of different cases of infection to reach a final diagnosis and microbiological identification of the causative organism B1. Develop the ability to solve problems associated with different infections such as microbial resistance to antimicrobial agents, reach a final diagnosis of a certain pathological condition caused by an infectious organism.
C- Professional and Practical Skills	C1. Apply professional applications such as managing a microbiology laboratory. C2. Identify different microbes at microbiology laboratory

	using basic techniques C3. Apply standards of infection control C4. Apply standard protocol in collection of pathological samples
D-General and transferable Skills	D1. Manipulate microbiological samples and reach a microbiological diagnosis of an infection. D1. Write protocols for identification of a given microorganism. D3. Communicate with colleagues and patients regarding a case caused by a microorganism. D4. Work in/with different groups. D5. Manage a microbiological laboratory.

4.Course Contents

Topic	**Lecture hours/week**	**Practical/Clinical hours/week**	**Total No. of hours hours/week**
1. Introduction and collection of pathological samples		1	1
2. Cleaning, sterilization and disinfection		1	1
3. Antimicrobial chemotherapy	2	1	3
4. Bacteremia, toxemia and toxic shock	2		2
5. Fever	2		2
6. Laboratory techniques used in epidemiology		1	1

7. Basic immunology 1	2		2
8. Basic immunology 2	2		2
9. Hypersensitivity reactions	2		2
10. Staphylococci	2		2
11. Mycobacterial infections	2		2
12. Streptococci	2		2
13. General virology	2		2
14. Viral Hepatitis	2		2
15. Human immunodeficiency	2		2
16. Covid-19	2		2
17. Bacterial, viral and fungal respiratory tract infections	2		2
18. Bacterial, viral and fungal GIT infections	2		2
19. Bacterial, viral and fungal CNS infections	2		2
20. Blood-transmitted diseases	2		2
21. Vector-transmitted diseases	2		2
22. Nosocomial infections	2		2
23. Infection control and Occupational safety	2	1	3
Total	40	5	25
5.Teaching and Learning Methods	Lectures Practical sessions Seminars		

6.Teaching and Learning Methods for students with limited Capacity	Self-learning activities such as use of internet and multimedia.
7.**Student Assessment**	
A.Student Assessment Methods	End of course written exam: A paper based exam **to assess** the student's comprehension and understanding of the class work Oral exam: to assess student's intellectual and communication abilities regarding basic knowledge and understanding of the course topics.
B.Assessment Schedule (Timing of Each Method of Assessment)	End of course exam (written, oral exams) **Week** 23
C.Weighting of Each Method of Assessment	Final written Examination: 20 marks Oral Examination:30 marks Total 50 marks
8.List of References	
A. Course Notes/handouts	Department Books, and notes on Medical Microbiology and Immunology by microbiology department, Faculty of medicine, Minia university
B. Essential Books	Jawetz, Melnick and Adelberg's Medical Microbiology 17th edition by Riedel. S (2019); McGraw-Hill Education Review of Medical Microbiology and Immunology 17th edition by warren levinson (2022); McGraw-Hill Education
C. Recommended Text Books	Janeway's Immunobiology 9th edition by Kenneth Murphy and Casey Weaver, (2016); Garland Publishing Inc. NY, London.
D. Periodicals, websites	TBD and updated during the course work

A. Matrix between ILOs and course topics				
Contents **(List of course topics)**	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
1. **Introduction and collection of pathological samples**	**A3 A5 A7**	**B1**	**C1,C5**	**D4 D5**
2. **Cleaning, sterilization and disinfection**	**A3 A5 A6**	**B1**	**C1,C4**	**D1 D3**
3. **Antimicrobial chemotherapy**	**A1 A5 A6**	**B1**	**C1**	**D1 D3**
4. **Bacteremia, toxemia and toxic shock**	**A1 A5 A7**	**B1 B1**	**C1, C1**	**D1 D1 D3**
5. **Fever**	**A1**	**B1**	**C1**	**D1 D3 D5**
6. Laboratory used in epidemiology	**A1**	**B1**	**C1,C1**	**D1 D4**
7. Basic immunology 1	**A3 A7**	**B1**	**C1,C4,C6**	**D3**
8. Basic immunology 2	**A1 A2 A4**	**B1**	**C1,C4,C6**	**D1 D3 D4**
9. Hypersensitivity reactions	**A3 A4 A5**	**B1 B2**	**C2**	**D1**
10. Staphylococci	**A1,A6, A7**	**B1**	**C4,C6**	**D1 D3 D4**
11. Mycobacterial	**A1 A5**	**B1 B2**	**C1, C5**	**D1 D3 D4**

infections				
12. Streotococci	**A3 A4**	**B1**	**C1**	**D5**
13. General virology	**A3 A4**	**B1**	**C1,C5**	**D3**
14. Viral Hepatitis	**A1 A3**	**B1 B2**	**C1, C4**	**D1 D3**
15. Human immunodeficiency	**A5 A6**	**B1**	**C1, 5**	**D1 D3 D4**
16. Covid-19	**A1,A1,A3**	**B1,B1**	**C1, C6,C5**	**D1,D1,D3**
17. Bacterial, viral and fungal respiratory tract infections	**A4 A5 A6**	**B1**	**C1**	**D3 D4**
18. Bacterial, viral and fungal GIT infections	**A3 A4**	**B1**	**C1,C5,C4**	**D3 D4**
19. Bacterial, viral and fungal CNS infections	**A1 A2 A3**	**B1**	**C1,C5,C4**	**D4 D5**
20. Blood-transmitted diseases	**A1 A2 A4 A6**	**B1**	**C1, C5,C4**	**D3 D5**
21. Vector-transmitted diseases	**A4 A5**	**B1**	**C1, C5,C4**	**D3**
22. Nosocomial infections	**A2**	**B1**	**C1,C1,C4**	**D4 D5**
23. Infection control and Occupational safety	**A1 A2 A3**	**B1**	**C1,C4,C6**	**D4**

B.Matrix of Coverage of Course ILOs by Methods of Teaching				
Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1 A2 A3 A4 A5 A6 A7	B1	C1	D1
Practical	A1	B1 B2	C1 C2 C3 C4	D1 D2 D5
Presentation/seminar	A1 A3 A4 A5	B1 B2	C1	D3 D4

C.Matrix of Coverage of Course ILOs by Methods of Assessment				
Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1 A2 A3 A4 A5 A6 A7	B1	C1	D1 D5
Oral Exam	A1 A5 A6	B1 B2	C1 C2 C3 C4	D2 D3 D4 D5

Course (5): Pharmacology

Pharmacology course specification for master degree in General Surgery (First part)

University: *Minia*

Faculty: *Medicine*

Department: Pharmacology

8. Basic Information		
• **Academic Year/level:** First Part of Master Degree	• **Course Title**: First Part of Master Degree in **General Surgery**	• **Code**: **GS200**
• **Number of teaching hours:** **Lectures:** 33 hours; 2 hours/week **Practical:** 12 hours; 1 hour/week		

9. Overall Aims of the course	By the end of course the student should be able to: 1. Provide the postgraduate student with the medical Knowledge and skills essential for the practice of specialty and necessary to gain. 2. Understand all molecular basics and diseases. 3. Describe different molecular techniques and their advanced applications. 4. Understand and use the research tools including internet and different laboratory equipment. 5. Retrieve the literature and understanding the evidence-based medicine 6. Maintain learning abilities necessary for continuous medical education. 7. Maintain research interest andabilities.
10.Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***	
A.Knowledge and Understanding	a.1 Mention the basic biochemical and physiological activities, their disturbances and how to be corrected. a.2 Define general pharmacokinetics as well specific properties of different groups of drugs putting into consideration age, sex and genetic-related variations that affect the response to drugs (pharmacogenetics). a.3 Recall general pharmacodynamics as well specific properties of different groups of drugs that include the drug's mechanism of action and pharmacological effects. a.4 List pharmacotherapeutics which reflects the role of drugs in prevention, diagnosis and treatment of diseases as well as prevention of conception. It includes also pathopharmacology of diseases and drugs, indications, contraindications, adverse reactions and drug interactions especially in high risk groups (extremes of age, pregnancy and lactation, liver kidney and cardiac diseases). Pharmaco-economics is included in this category.

	a.5 Memorize Systemic pharmacology which includes drugs acting on different body systems such as cardiovascular, autonomic, respiratory, gastrointestinal, endocrine, blood ,……. a.6 Define the basic, and ethics of scientific research. a.7 List the principles of quality in professional practice in the field of therapeutics and applied pharmacology.
B. Intellectual Skills	b.1 Develop the skills in selecting and using drugs safely and efficiently knowing their limits and the potential risks b.2 Develop the ability to solve medical problems arising from use of drugs and the development of resistance or tolerance encouraging them to search for alternative approaches after revising the diagnosis. b.3 Participate in clinical or laboratory risk management activities as a part of clinical governance. b.4 Present and defend his/her data in front of a panel of experts. b.5 Formulate management plans and alternative decisions in different situations in the field of Pharmacology. b.6.Assess risk in research and experimentation using new drugs and/or chemicals. b.7. Plan for the development of performance in the field of therapeutics and pharmacological researches. b.8.Assess different clinical problems and formulate pharmacological researches to solve such problems. b.9. Combine knowledge for Professional problems' solving.

C. Professional and Practical Skills	By the end of the study of master program in **Pharmacology** the candidate should be able to: c.1 Evaluate the need of his/her career to join the major advances in drug information c.2 Perform the basic lab skills essential to the course. c.3 Develop plans for performing experiments related to pharmacology. c.4 Use information technology in some of the pharmacology related situations. c.5 Band better understanding of the normal structure and function.
D.General and transferable Skills	After completing the course, the student should be able to d1. Perform practice-based improvement activities using a systemic methodology (share in audits and risk management activities and use logbooks). d2. Collect and verify data from different sources. d3. Analyze and interpret data. d.4 Appraise evidence from scientific studies. d.5 Use information technology to manage information, access on-line medical researches to support his/her own education.

Last date of approval /1/2023

4- Course Contents			
Topic	**Lecture hours/week**	**Practical/Clinical hours/week**	**Total No. of hours hours/week**
1. Pharmacokinetic	3	-	3

variables			
2. Autonomic Pharmacology	3	2	٥
3. Drug interaction and adverse drug reaction	2	2	٤
4. Pharmacology of the cardiovascular system and Diuretics	3	2	٥
5. Drugs affecting blood diseases	2	-	٢
6. Pharmacology of GIT	2	-	٢
7. Corticosteroids	1	2	٣
8. Drugs used in diabetes	2	-	٢
9. Nonsteroidal anti-inflammatory drugs and treatment of gout	2	2	4
10. Sedative hypnotic drugs	2	-	٢
11. Chemotherapy	6	-	٦
12. General and local anesthetic drugs	3	2	٥
13. Skeletal muscle relaxants	2	-	٢
14. Treatment of	2	-	٢

shock			
Total	33	12	42
5-Teaching and Learning Methods	1-Lectures & discussions. 2-Assignments 3-Attending and participating in scientific conferences and workshops to acquire the general and transferable skills needed		
6-Teaching and Learning Methods for students with limited Capacity	Additional lectures, adjusting time and place of lectures according to their schedule and capacity		
7- Student Assessment			
A-Student Assessment Methods	**1- Written exam** to assess the capability of the student for assimilation and application of the knowledge included in the course. **2-Oral exam** to assess the student intellectual and communication skills regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the % of achievement of the intended learning outcomes of the course **3- Practical exam** to assess the student's ability to identify different methods of identification of different drug actions and interactions.		
B-Assessment Schedule (Timing of Each Method of	***Assessment 1: one written exam*** *by the end of the course*		

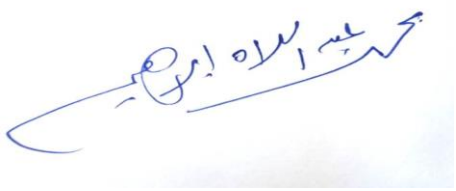
Assessment)	**Assessment 2: *Oral exam,*** *after the written exam* **Assessment 3: *Practical exam*** **Formative only assessment:** log book.
8-Weighting of Each Method of Assessment	**Written examination: 16 marks 40%** **Oral/ Practical examination: 24 marks 60%** **Total: 40 marks 100%**
9- List of References	
I. Course Notes/handouts	Lecture notes prepared by the staff members in the department.
J. Essential Books	- Principles of pharmacology the pathophysiologic basis of drug therapy
K. Recommended Text Books	- Goodman & Gilman - Katzung
L. Periodicals, websites	Pharmacological Reviews - Journal of Pharmacology and Experimental therapeutics - British journal of pharmacology - European journal of pharmacology - Pharmacological research **http://www.ncbi.nlm.nih.gov/pubmed/**

Course Coordinator/s:

Dr. Ass. Prof. Dr. Seham Abdelwakeel

Head of Department:

Professor Dr. Mohamed Abdellah Ibrahim



Date of <u>last update</u> & approval by department Council:

/ / 2023

مسمى المقرر	جزء اول ماجستير جراحة عامة
كود المقرر	GS 200

جامعة/أكاديمية : ..المنيا**.....**

كلية / معهد**..... :**الطب.....

قسم : **الفارماكولوجى**

A. Matrix of Coverage of Course ILOs By Contents

Contents **(List of course topics)**	**Week No.**	**Intended Learning Outcomes (ILOs)**			
		A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
		A	**B**	**C**	**D**
1. Pharmacokinetic variables	1	+	+		
2. Autonomic Pharmacology	٢	+	+	+	
3. Drug interaction and adverse drug reaction	٣	+	+	+	
4. Pharmacology of the cardiovascular system and Diuretics	٤	+	+	+	+
5. Drugs affecting blood diseases	٥	+	+	+	
6. Pharmacology of GIT	٦	+	+	+	

7. Corticosteroids	٧	+	+	+	
8. Drugs used in diabetes	٨	+	+	+	+
9. Nonsteroidal anti-inflammatory drugs and treatment of gout	٩	+	+	+	+
10. Sedative hypnotic drugs	١٠	+	+	+	+
11. Chemotherapy	١١-13	+	+	+	
12. General and local anesthetic drugs	١٤	+	+	+	
13. Skeletal muscle relaxants	١٥	+	+	+	+
14. Treatment of shock	١٦	+	+	+	+

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Lecture	x	x		
Practical	x	x	x	x
Presentation/seminar	x	x	x	
Journal club	x	x		
Thesis discussion		x	x	x
Training courses & workshops		x	x	x
Other/s (Specify)				

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Written exam	x	x	x	
Oral Exam	x	x		x
Assignment	x		x	x
Other/s(Specify)				

Blueprint of General surgery MSC (Pharmacology Examination Paper)

16 Mark

	Topics	**HOURS**	**Knowledge %**	**Intellectual %**	**% of topics**	**Mark**	**Actual mark**
1	Pharmacokinetic variables	3	100	0	8.57	1.32	1
2	Autonomic Pharmacology	3	70	30	8.57	1.32	1
3	Drug interaction and adverse drug reaction	2	70	30	5.71	0.9	1
4	Pharmacology of the cardiovascular system and Diuretics	3	70	30	8.57	1.32	1.5
5	Drugs affecting blood diseases	2	70	30	5.71	0.9	1
6	Pharmacology of GIT	2	80	20	5.71	0.9	1
7	Corticosteroids	1	80	20	2.85	0.45	0.5
8	Drugs used in diabetes	2	100	0	2.85	0.9	1
9	Nonsteroidal anti-inflammatory drugs and treatment of gout	2	70	30	5.71	0.9	1
10	Sedative hypnotic drugs	2	80	20	5.71	0.9	1
11	Chemotherapy	6	60	40	17.14	2.74	2.5
12	General and local anesthetic drugs	3	80	20	8.57	1.32	1.5
13	Skeletal muscle relaxants	2	100	0	5.71	0.9	1
14	Treatment of shock	2	75	25	5.71	0.9	1
	Total	**33**			**100%**		١٦

Course (6): Medical Ethics

Course Specification of Medical Ethics

Master degree of General Surgery (2022-2023)

University: Minia

Faculty: Medicine

Program on which the course is given: Master degree of General Surgery

Major or minor element of program: Medical ethics, ethics of medical research

Department offering the program: General Surgery Department

Department offering the course: Forensic Medicine & Clinical Toxicology Department

Academic year / Level: First part

Date of specification approval: Last date of approval: **7/11/2021**

A. Basic Information		
• **Academic Year/level:** Post graduate; 1st Part MSC, General Surgery	• **Course Title**: Course Specification of Medical Ethics (Master degree of General Surgery)	• **Code**:
• **Number of teaching hours:** - **Lectures:** Total of 36 hours; ٢ hour/week		
B- Professional Information		
1. Overall Aims of the course	By the end of the course the student should be able to identify the value of studying and practicing medicine, the duties of doctors towards their patients, colleagues and community, the ethics in medical consultations among colleagues and also able to explain respect the patient's confidentiality and secrets, recognize the role of health care providers in the community and describe medical errors, negligence and legal issues,	

	ethics of medical research especially on human beings and finally able to explain ethics and evidence based medicine
2. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***	
A- Knowledge and Understanding	**A.1**- Identify the basic concept of learning and practicing medicine from the religious and human point of view. **A.2-** Identify the very beneficial impressive history of medicine; ethics related. **A.3-** Classify the main principles of medical ethics. **A.4-** Recognize an integrated approach to deal with patients, their families, community and medical staff in an ethical, legal and human manner. **A.5-** Identify rules in low and regulations to deal with patients in practicing medicine. **A.6-** Explain the standard and accredited methods of clinical research especially on human beings.
B- Intellectual Skills	**B.1-** Design approach to patients in different situations; critical and noncritical ones. **B.2-** Develop adequate communication skills with patients, community and colleagues. **B3-** Conclude in medical researches on clear ethical basis. **B.4-** Use knowledge and learn according to standard basis worldwide. **B.5-** Apply and practice medicine according to concepts of evidence based medicine. **B.6-** Recognize common ethical dilemma and suggest a proper solution.
C- Professional and Practical Skills	**C.1-** Use a high professional approach with colleagues and patients. **C.2-** Modify steps of upgrading his/her educational, academic and clinical carriers. **C.3-** Use the standard guidelines in managing patients. **C.4-** Identify what is called as clinical governance and auditing his /her Performance.
D- General and transferable Skills	**D.1-** Identify how to respect his/herself and the profession. **D.2-** Develop adequate behavior and skill communications with community. **D.3-** Modify life and live like others sharing social and national affairs. **D.4-** Develop the capacity of helping people and share in upgrading their culture and education.

TOPIC	Lecture Hours	Practical hours	Total hours

	D.5- Identify how to participate in the national and social affairs and responsibilities.

3- Course Contents

Medical Responsibility and Duties of the physician	2	-------	2
Medical [illegible]	2	-------	2
[illegible]	2	-------	2
Diagnosis of death & Death Certificates	2	-------	2
Consent in medical field	2	-------	2
Medical malpractice	2	-------	2
Medicolegal importance of Organ transplantation	2	-------	2
Operative precautions and Diagnosis of death	2	-------	2
Medical syndicate	2	-------	2
Professional secrecy	2	-------	2
Female circumcision	2	-------	2
Physician disciplinary proceeding	2	-------	2
Domestic Violence	2	-------	2
Euthanasia (Mercy death)	2	-------	2
Ethics in medical research	2	-------	2
Medical reports	2	-------	2
Rules of using addictive drugs among physicians	2	-------	2
Medical certificates	2	-------	2
Total	(36 hr.) ٢/W	-------	(36 hr.) /W٢

4- Teaching and Learning Methods	4.1 - Straight lectures; power point presentations 4.2 - Brain storming with the students 4.3 - Questions and Answers

5- Teaching and Learning Methods to students with limited Capacity	(Not applicable)
6- Student Assessment	
A. Student Assessment Methods	**TENDANCE CRITERIA**: by Faculty laws (log book) **ASSESSMENT TOOLS:** *Final Written exam: short essay to asses knowledge and understanding problem solving to asses intellectual skills MCQ to assess knowledge and intellectual skills *Oral exam; to asses knowledge and understanding. Also intellectual skills, attitude, and communication.
B. Assessment Schedule	• Final Written exam • Oral exam
C. Weighting of Assessment	• Final Written exam 80% (100 Marks) • Oral exam 20% (25 Marks) Total 100% (125 Marks)
7- List of References	
A. Course Notes/handouts	Department book by staff members. Log Book.
B. Essential Books (text books)	Medical Ethics Manual, 2nd Edition John R. Williams, 2009. Medical Ethics, 2nd Edition, Michael Boylan, 2014.
C. Recommended Books	Text book of medical ethics, Erich H. Loewy, 1989
D. Periodicals	Journal of Medical Ethics Journal of Medical Ethics and History of Medicine
E. Web sites	**https://en.wikipedia.org/wiki/Medical_ethics** https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5074007/
8- Facilities required for teaching and learning	Classrooms for theoretical lectures and tutorials

Course Coordinator: Dr. Morid Malak Hanna

Head of Department:
Prof. Dr. Irene Atef Fawzy

Course Specification of Medical Ethics **Master degree of General Surgery** **(First part))**	**مسمى المقرر**
GS200	**كود المقرر**

جامعة/أكاديمية : .....المنيا.....

كلية / معهد: .....الطب البشرى.....

قسم: .....الطب الشرعى والسموم الأكلينكية.....

A. The Matrix of Coverage of Course IL by Contents

Contents	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Medical Responsibility and Duties of the physician	**A1,3**	**B4**	**C1**	**D1,2**
Medicolegal aspect of cloning	**A1,2**	**B3**	**-**	**-**
Defensive Medicine	**A4,5**	**B6**	**C3**	**D3**
Diagnosis of death & Death Certificates	**A1,2**	**B2**	**-**	**-**
Consent in medical field	**A2,5**	**-**	**-**	**-**
Medical malpractice	**A1,6**	**B5**	**C4**	**D5**
Medicolegal	**A5,6**	**B3**	**-**	**-**

importance of Organ transplantation				
Operative precautions and Diagnosis of death	**A1,2,3**	**-**	**-**	**D4**
Medical syndicate	**A2,4,5**	**B2**	**-**	**D1.2,3**
Professional secrecy	**A2,4,6**	**-**	**C2**	**-**
Female circumcision	**A1,3,4**	**B1**	**-**	**-**
Physician disciplinary proceeding	**A1,2**	**-**	**-**	**-**
Domestic Violence	**A3,4**	**-**	**C1,2**	**D1.2**
Euthanasia (Mercy death)	**A1,4**	**B1,2**	**-**	**-**
Ethics in medical research	**A1,6**	**B3,5**	**C3**	**D1,4**
Medical reports	**A1,5**	**-**	**-**	**-**
Rules of using addictive drugs among physicians	**A2,6**	**-**	**C4**	**-**
Medical certificates	**A1,4**	**B1,2**	**-**	**-**

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1,2,3,4,5,6	B1,2,3,4,5,6	C1,2,3,4	D1,2,3,4,5
Practical				
Clinical (Including grand rounds)				
Presentation/seminar	A1,2,3	B1,2,3	C1	D1,2
Journal club				
Thesis discussion				
Training courses & workshops	A1	B1-2-3	C1	D1,2

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1,2,3,4,4,5,6	B1,2,3,4,5		
Practical exam				
Clinical exam				
Oral Exam	A1,2,3,4,4,5,6	B1,2,3,4,5	C1	D1,2
Assignment				
Structured oral exams				

Blueprint of 1st master of general surgery

Postgraduates" Medical Ethics Examination Paper (40 marks)

	Topic	Hours	Knowledge %	Intellectual%	% of topic	N of items Per topic	Knowledge		Intellectual		Marks	Actual Mark
							N of items	Mark	N of items	Mark		
1	**Medical Responsibility and Duties of the physician & Defensive Medicine**	4	75	25	**11.1**	1	1	**4.44**	1	**20**	**4.44**	**4**
2	**Medicolegal aspect of cloning**	2	75	25	**5.55**	1	1	**2.22**	---	---	**2.22**	**3**
3	**Diagnosis of death & Death Certificates**	2	70	30	**5.55**	1	1	**2.26**	---	---	**2.26**	**3**
4	**Consent in medical field & Medical malpractice**	4	80	20	**11.1**	1	1	**4.44**	1	**20**	**4.44**	**4**
5	**Medicolegal importance of Organ transplantation & Female circumcision**	4	75	25	**11.1**	1	1	**4.44**	---	---	**4.44**	**4**
6	**Operative precautions and Diagnosis of death**	2	70	30	**5.55**	1	1	**2.22**	---	---	**2.22**	**2**

Second Part

Course (7): General Surgery

General Surgery, course specification for Master degree in General Surgery (Second part)

University: *Minia*

Faculty: *Medicine*

Department: General Surgery

Last date of approval: 3 /2023

<table>
<tr><td colspan="3">11.Course Information</td></tr>
<tr><td>• Academic Year/level: Second Part of Master Degree</td><td>• Course Title:
Second Part of Master Degree in General Surgery</td><td>• Code: GS200</td></tr>
<tr><td colspan="3">• Number of teaching hours:
Lectures: 540 hours; 12 hours/week; 45 weeks (1.5 teaching years)
Practical: 180 hours; 4 hours/week; 45 weeks (1.5 teaching years)
Total: 720 hours;16hours/week; 45 weeks (1.5 teaching years)</td></tr>
<tr><td>12.Overall Aims of the course</td><td colspan="2">By the end of the course the student must be able to:
Acquire the basic Knowledge and surgical skills necessary for General Surgery in clinical reasoning, diagnosis and management of diseases including Shock-Multiple Injured Patients-Neck swelling.</td></tr>
<tr><td colspan="3">13.Intended learning outcomes of course (ILOs):
Upon completion of the course, the student should be able to:</td></tr>
<tr><td>I- Knowledge and Understanding</td><td colspan="2">The student finishes the course; he will be able to:
a.1 Define the principles of basics of General Surgery, acid base balance and mangement of multiple injred patients
b.2 Identify the facts and principles of the relevant basic and clinically supportive sciences related to General Surgery
b.3 Describe the basic ethical and medicolegal principles revenant to the General Surgery
b.4 Identify the basics of quality assurance to ensure good</td></tr>
</table>

	clinical care in General Surgery b.5 Recognize the ethical and scientific principles of medical research b.6 State the impact of common health problems in the field of General Surgery on the society
J- Intellectual Skills	*The student finishes the course; he will be able to:* b.1 Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to General Surgery b.2 Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to General Surgery b.3 Design and present cases , seminars in common problem b.4 Formulate management plans and alternative decisions in different situations in the field of the General Surgery
K- Professional and Practical Skills	*After completing the course, the student should be able to:* c.1 Obtain proper history and examine patients in caring and respectful behaviors c.2 Order non invasive/invasive diagnostic procedures: Basal laboratory investigation and X- ray skull-neck-abdomen- chest- upper & lower limbs c.3 Interpret non invasive/invasive diagnostic procedures: Basal laboratory investigation and X- ray skull-neck-abdomen- chest- upper & lower limbs c.4 Perform non invasive/invasive therapeutic procedures inclding operation for multiple injured patients c.5 Prescribe non invasive and invasive therapeutic procedures including treatment of shock and surgical infection c.6 Carry out patient management plans for common conditions related to General Surgery including: Acid- base balance, shock, Hemorrhage, Surgical infection, and Multiple Injured patient c.7 Use information technology to support patient care decisions and patient education in common clinical situations related to Procedure presentation c.8 Provide health care services aimed at preventing health problems related to Procedure presentation like: Shock, Hemorrhage, and Surgical infection c.9 Provide patient-focused care in common conditions related to General Surgery, while working with health care professionals, including those from other disciplines

L- General and transferable Skills	*After completing the course, the student should be able to:* d.1 Perform practice-based improvement activities using a systematic methodology(audit, logbook) d.2 Appraises evidence from scientific studies(journal club) d.3 Conduct epidemiological Studies and surveys d.4 Perform data management including data entry and analysis d.5 Facilitate learning of junior students and other health care professionals

4- Course Contents

Topic	**Lecture hours/week**	**Practical/Clinical hours/week**	**Total No. of hours hours/week**
12. Shock and hemorrhage	40	-	40
13. Surgical infection	18	-	18
14. Fluid, electrolyte,and acid base balance	18	-	18
15. Lymphatic system	18	15	33
16. Abdominal wall, Hernia, Testis & Scrotum	18	15	33
17. Breast	56	15	71
18. Neck surgery & Thyroid gland	56	15	71
19. Trauma & Multiple injured patients	40	15	55
20. G.I.T system, Peritoneum & Mesentry	70	15	85
21. Pancreas and Biliary system	40	15	55
22. Vascular surgery	40	15	55
23. Chest surgery	18	15	33

24. Pediatric surgery	40	15	55
25. Neurosurgery	18	15	33
26. Plastic surgery	40	15	55
Total	**540**	**180**	**720**
5-Teaching and Learning Methods	1. Lectures 2. Clinical/practical rounds: • Bedside tutorial • Case presentation • Group discussion • Problem solving • Operative room tutorial 3. Seminars 4. Training courses 5. workshops 6. Conference attendance 7. Journal club		
6-Teaching and Learning Methods for students with limited Capacity	Additional lectures, adjusting time and place of lectures according to their schedule and capacity		
7- Student Assessment			
A-Student Assessment Methods	**1-Written exam** to assess the capability of the student for assimilation and application of the knowledge included in the course. The exam involves:		

	• Short essay • MCQs • Problem solving **2- Oral/Clinical exam** to assess the student intellectual and communication skills regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the % of achievement of the intended learning outcomes of the course. The exam involves: • Case sheet • Case discussion • OSCE • Imaging slides
B-Assessment Schedule (Timing of Each Method of Assessment)	***Assessment 1: one written exam*** *by the end of the course* **Assessment 2: *Oral/Clinical exam,*** *after the written exam* **Formative only assessment:** log book.
C-Weighting of Each Method of Assessment	**Written examination:** 40%; 280 Mark **Oral/Clinical examination**: 60%; 420 Mark **Total**: 100 %; 700 Mark
8- List of References	
A-Course Notes/handouts	Course notes and Staff members print out of lectures and/or CD copies
B-Essential Books	KASR ALAINY Introduction to Surgery, 9th edition, Faculty of Medicine, Cairo University, 2021

C- Recommended Text Books	Bailey & Love`s Short Practice of Surgery, 27th Edition - International Student`s Edition set volume 1 & 2. By Norman Williams - P Ronan O`Connell. 2022 Sabiston Textbook of Surgery: The Biological Basis of Modern Surgical Practice, 21st Edition, 2021. Courtney Townsend. Current Diagnosis and Treatment Surgery, 15th Edition, 2020, Gerard Doherty (Author), McGraw Hill / Medical MATARY TEXTBOOK OF CLINICAL SURGERY, 12th Edition, 2018
D-Periodicals, websites	To be determined and updated during the course work. **Websites:** https://www.medicalpracticewebsitedesign.com/general-surgery-website-portfolio.php **Periodicals:** 3- International Journal of Surgey 4- British Journal of Surgery

Course Coordinator/s:

Dr. **Yasser Ali Kamal,**

Dr. **Abdel-rahman Gamal Saleh,**

Dr. **Mohamed Jamal El-sherif**

Head of Department:

Prof. Dr. **Amr Hamdy**

Amr Hamdy

Date of last update & approval by department Council:

5 / 3 / 2023

مسمى المقرر	جزء ثاني ماجستير الجراحة
كود المقرر	GS 200

جامعة/أكاديمية : ..المنيا**.....**

كلية / معهد**..**الطب.....

قسم : **الجراحة العامة**

A. Matrix of Coverage of Course ILOs By Contents

Contents **(List of course topics)**	**Week No.**	**Intended Learning Outcomes (ILOs)**			
		A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
		A	**B**	**C**	**D**
Shock and hemorrhage		+	+		
Surgical infection		+	+		
Fluid, electrolyte,and acid base balance		+	+		
Lymphatic system		+	+	+	+

Abdominal wall, Hernia, Testis & Scrotum		+	+	+	+
Breast		+	+	+	+
Neck surgery & Thyroid gland		+	+	+	+
Trauma & Multiple injured patients		+	+	+	+
G.I.T system, Peritoneum & Mesentry		+	+	+	+
Pancreas and Biliary system		+	+	+	+
Vascular surgery		+	+	+	+
Chest surgery		+	+	+	+
Pediatric surgery		+	+	+	+
Neurosurgery		+	+	+	+
Plastic surgery		+	+	+	+

B.Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Lecture	**x**	**x**		
Practical	x	x	x	
Presentation/seminar	x	x	x	x
Journal club	x	x	x	x
Thesis discussion	x	x	x	x
Training courses & workshops	x	x	x	
Other/s (Specify)				

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Written exam	x	x		
Oral/Clinical Exam	x	x	x	
Assignment	x	x	x	x
Other/s(Specify)				

Blueprint of General Surgery course for Master 2nd part Examination Paper

Topic	Hours	Knowledge%	Intellectual%	% of topic	Mark	Actual mark
First Paper:						
Shock and hemorrhage	40	80	20	7.41	20.74	20.00
Surgical infection	20	80	20	3.70	10.37	10.00
Fluid, electrolyte,and acid base balance	20	80	20	3.70	10.37	10.00
Lymphatic system	20	80	20	3.70	10.37	10.00
Abdominal wall, Hernia, Testis & Scrotum	20	70	30	3.70	10.37	10.00
Breast	56	60	40	10.37	29.04	30.00
Neck surgery & Thyroid gland	56	60	40	10.37	29.04	30.00
Trauma & Multiple injured patients	40	60	40	7.41	20.74	20.00
Second Paper:						
G.I.T system, Peritoneum & Mesentry	70	60	40	12.96	36.30	40.00
Pancreas and Biliary system	40	60	40	7.41	20.74	20.00
Vascular surgery	40	60	40	7.41	20.74	20.00
Chest surgery	19	70	30	3.52	9.85	10.00
Pediatric surgery	40	70	30	7.41	20.74	20.00
Neurosurgery	19	70	30	3.52	9.85	10.00
Plastic surgery	40	70	30	7.41	20.74	20.00
Total	540			100%		280

Section III:

PROGRAMME CORRELATIONS

Program Correlations

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

Annex (1): Comparison between National Academic Quality Assurance & Accreditation (NAQAAE) General Academic Reference Standards (GARS) and Faculty Academic Reference Standards (ARS)

NAQAAE **برامج الماجستير**	**Faculty** **Master (MSC) Program**
٢.المعايير القياسية العامة: **NAQAAE General Academic Reference Standards "GARS" for Master Programs**	**2. Faculty Academic Reference Standards (ARS) for Master Program**
٢,١. المعرفة والفهم: **بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا علي بكل من: الفهم والدراية**	**2.1. Knowledge & Understanding:** **Upon completion of the Master Program in General Surgery, the graduate should have sufficient knowledge and understanding of:**
٢,١,١. النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة	2.1.1. Understand the scientific basis and modern knowledge in the field of specialization and related medical sciences
٢,١,٢. التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة	2.1.2. The mutual influence of professional practice on work environment, working conditions, and job characteristics.
٢,١,٣. التطورات العلمية في مجال	2.1.3. Scientific developments in the field of

التخصص	specialization
٢,١,٤. المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص	2.1.4. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors
٢,١,٥. مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص	2.1.5. Quality principles in the scholarly field
٢,١,٦. أساسيات وأخلاقيات البحث العلمي	2.1.6. Basis of research methodology and medical ethics.
المهارات الذهنية: 2.2. **بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:**	**2.2. Intellectual Skills:** **Upon completion of the master program of General Surgery, the graduate should be able to:**
2.2.1. تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل	2.2.1. Use judgment skills for analytical and critical problem solving
2.2.2. حل المشاكل المتخصصة مع عدم توافر بعض المعطيات	2.2.2. Capable of integrating knowledge and dealing with complex subjects to solve problems
2.2.3 الربط بين المعارف المختلفة لحل المشاكل المهنية	2.2.3. Be capable of integrating research results and/or results of history, physical and laboratory test findings to solve a research or a clinical problem.
2.2.4. إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية	2.2.4. Effectively apply research methods and carrying out a medical research thesis
2.2.5. تقييم المخاطر في الممارسات المهنية في مجال التخصص	2.2.5. Be aware of risk management principles, and patient safety.
2.2.6. التخطيط لتطوير الأداء في مجال التخصص	2.2.6. Establish goals, commitments, and strategies for improved professional performance in the field of specialty
2.2.7. اتخاذ القرارات المهنية في سياقات مهنية متنوعة.	2.2.7. Take professional situational decisions and logically support them.
3.2. المهارات المهنية: **بانتهاء دراسة برنامج الماجستير**	**3.2. Professional Skills:** **Upon completion of the master program of General**

يجب أن يكون الخريج قادرا على:	Surgery, the graduate must be able to:
3.2.1. إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص.	3.2.1. Master the basic and some advanced professional skills in his scholarly field.
٣,٢,٢كتابة و تقييم التقارير المهني.	3.2.2. Write and evaluate medical or scientific reports
٢,٣,٣تقييم الطرق والأدوات القائمة في مجال التخصص	3.2.3. Assess and evaluate technical tools during research
4.2. المهارات العامة والمنتقلة: **بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:**	**4.2. General and transferable skills** **Upon completion of the master program of General Surgery, the graduate should be able to:**
٤,٢,١. التواصل الفعال بأنواعه المختلفة	4.2.1. Communicate effectively using a written medical record, electronic medical record, or other digital technology.
٤,٢,٢. استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية	4.2.2. Use of information technology (computer to create, process, store, secure and exchange electronic data) in the field of medical practice.
4.2.3 . لتقييم الذاتي وتحديد احتياجاته التعلمية الشخصية	4.2.3. Assess himself and identify personal learning needs
4.2.4 . استخدام المصادر المختلفة للحصول على المعلومات والمعارف	4.2.4. Use various sources for information (physical and digital sources).
4.3.5 . وضع قواعد ومؤشرات تقييم أداء الآخرين	4.2.5. Setting indicators for evaluating the performance of others
4.2.6 . العمل في فريق، وقيادة فرق في سياقات مهنية مختلفة	4.2.6. Work in a team, and Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system
4.2.7 . إدارة الوقت بكفاءة	4.2.7. Manage time efficiently
٤,٢,٨.التعلم الذاتي والمستمر	4.2.8. Demonstrate skills of self-learning and lifelong learning needs of medical profession.

Annex (2): Comparison between Faculty Academic Reference Standards (ARS) and ILOs of Program of Master degree (MSc) in General Surgery

Faculty **Master (MSC) Program**	**ILOs of Program of Master degree (MSc) in General Surgery**
2. Faculty Academic Reference Standards (ARS) for Master Program	
2.1. Knowledge & Understanding: **Upon completion of the Master Program** **in General Surgery, the graduate should have sufficient knowledge and understanding of:**	**A. Knowledge & Understanding:**
2.1.1. Understand the scientific basis and modern knowledge in the field of specialization and related medical sciences	a.1 Explain the essential facts and principles of relevant basic sciences including Pathology, Anatomy, Histology and Physiology, pharmacology biochemistry, and medical ethics related to General Surgery. a.2 Recognize essential facts of clinically supportive sciences including General Surgery. a.3 Identify etiology, pathogenesis, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to General Surgery.
2.1.2. The mutual influence of professional practice on work environment, working conditions, and job characteristics.	a.7 Explain the impact of common health problems in the field of General Surgery on the society and how good clinical practice improves these problems.
2.1.3. Scientific developments in the field of specialization	a.8 Idetify recent advances in the field of General Surgery
2.1.4. Recognize basics of medico-legal aspects of practice,	a.4 Identify the basic ethical and medicolegal principles that should be applied in practice and

malpractice and avoid common medical errors	are relevant to the General Surgery
2.1.5. Quality principles in the scholarly field	a.5 Identify the basics and standards of quality assurance to ensure good clinical care practice in the field of General Surgery.
2.1.6. Basis of research methodology and medical ethics.	a.6 Identify the ethical and scientific principles of medical research in General Surgery.
2.2. Intellectual Skills: **Upon completion of the master program of General Surgery, the graduate should be able to:**	**B. Intellectual Skills:**
2.2.1. Use judgment skills for analytical and critical problem solving	b.2 Solve problems of common clinical situations related to General Surgery using an investigatory and analytic thinking approach.
2.2.2. Capable of integrating knowledge and dealing with complex subjects to solve problems	b.4 Formulate management plans and alternative decisions in different situations in the field of the General Surgery
2.2.3. Be capable of integrating research results and/or results of history, physical and laboratory test findings to solve a research or a clinical problem.	b.1 Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the General Surgery. b.7 Combine knowledge for professional problems' solving.
2.2.4. Effectively apply research methods and carrying out a medical research thesis	b.3 Design a research study or review on common clinical problems relevant to the field of General Surgery
2.2.5. Be aware of risk management principles, and patient safety.	b.5 Assess risk in professional practices in the field of General Surgery.
2.2.6. Establish goals, commitments, and strategies for improved professional performance in the field of specialty	b.6 Plan for the development of performance in the field of General Surgery.

2.2.7. Take professional situational decisions and logically support them.	b.4 Formulate management plans and alternative decisions in different situations in the field of the General Surgery b.8 Assess common ethical dilemma and its proper sollution
3.2. Professional Skills: **Upon completion of the master program of General Surgery, the graduate must be able to:**	**C. Professional Skills:**
3.2.1. Master the basic and some advanced professional skills in his scholarly field.	c.1 Carry out patient management plans (clinical diagnosis, investigations, and modality of treatment) for common conditions related to General Surgery. c.3 Perform competently non invasive and invasive procedures considered essential for the General Surgery. c.4 Provide health care services aimed at preventing health problems related to General Surgery. c.5 Provide patient-focused care in common conditions related to General Surgery, while working with health care professionals, including those from other disciplines.
3.2.2. Write and evaluate medical or scientific reports	c.6 Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets. c.7 Orgaize a proper medical report.
3.2.3. Assess and evaluate technical tools during research	c.2 Use information technology to support patient care decisions and patient education in common clinical situations related to General Surgery.

4.2. General and transferable skills **Upon completion of the master program of General Surgery, the graduate should be able to:**	**D. General and transferable skills**
4.2.1. Communicate effectively using a written medical record, electronic medical record, or other digital technology.	d.3 Maintain therapeutic and ethically sound relationship with patients d.5 Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.
4.2.2. Use of information technology (coputer to create, process, store, secure and exchange electronic data) in the field of medical practice.	d.2 Perform data management including data entry and analysis using information technology to manage information, access online medical information; and support own education. d.9 Organize material from different scientific sources including library, electronic and online resources.
4.2.3. Assess himself and identify personal learning needs	d.1 Perform practice-based improvement activities using a systematic methodology d.8 Be aware of the importance of life-long self-learning and show a strong commitment to it.
4.2.4. Use various sources for information (physical and digital sources).	d.9 Organize material from different scientific sources including library, electronic and online resources.
4.2.5. Setting indicators for evaluating the performance of others	d.10 Dealing effectively with unethical behavior of other members of healthcare team.
4.2.6. Work in a team, and Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system	d.4 Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.

	d.7 Assist patients in dealing with system complexities.
4.2.7. Manage time efficiently	d.6 Practice cost-effective health care and resource allocation that does not compromise quality of care.
4.2.8. Demonstrate skills of self-learning and lifelong learning needs of medical profession.	d.8 Be aware of the importance of life-long self-learning and show a strong commitment to it.

University: MINIA

Faculty(s): MEDICINE

Department: General Surgery

Program: Master degree (MSc) in General Surgery (GS200)

Matrix of Coverage of Course ILOs By Contents

Courses: (List of courses in first and second parts)	Program Intended Learning Outcomes (ILOs)																														
	Knowledge & Understanding .A							B. Intellectual Skills								C. Professional & Practical skills							D. General & Transferable Skills									
	a. 1	a. ٢	a. ٣	a. ٤	a. ٥	a. ٦	a. ٧	b. 1	b. 2	b. 3	b. 4	b. 5	b. 6	b. 7	b. 8	c. 1	c. 2	c. 3	c. 4	c. 5	c. ٦	c. ٧	d. 1	d. 2	d. 3	d. 4	d. 5	d. 6	d. 7	d. 8	d. 9	d. 10
Surgical Anatomy and Histology	x	x	x					x	x							x	x														
Physiology and Biochemistry	x	x	x					x	x							x	x														
Surgical Pathology	x	x	x					x	x							x	x														
Microbiology	x	x	x					x	x							x	x														
Pharmacology	x	x	x					x	x							x	x														
Medical ethics				x											x						x										
General Surgery and its branches	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

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Section IV:

PROGRAM REPORT

Programme Report of Master degree in General Surgery

نموذج رقم (١٥)

تقرير عن برنامج درسي

Program report

For academic year 2022 /2023

University/Academy: Minia

Faculty/ institute: Medicine

Department: Surgery

A- BASIC INFORMATION

1-Program title: **اسم البرنامج**	Master Degree (MSc) in General Surgery (GS200)
2-Speciality: **التخصص**	General Surgery
3-No of program's years: **عدد السنوات الدراسية**	2 years
4- No of courses **عدد المقررات**	٧ courses include: 1. Surgical Anatomy and Histology 2. Physiology and Biochemistry 3. Surgical Pathology 4. Microbiology 5. Pharmacology 6. Medical ethics 7. General surgery
5- Roles that regulate formation of examiners committees: annex **أسس تشكيل لجان الممتحنين**	Depending on the department council and faculty rules and according to the specialties
6-External examiners' system: **نظام الممتحنين الخارجيين**	Available (√) not available ( )

B- PROFESSIONAL INFORMATION

7-Statistics **إحصائيات**	
-No of Students joined the program **عدد الطلاب الملتحقين بالبرنامج**	2020: 2 2021: 2 2022: 1
- Success rate in the program (%) **معدل النجاح في البرنامج (%)**	100 %
-Ratio of students attending the program this year (in relation to those of last 3 years) **اتجاه الالتحاق بالبرنامج (منسوبة الى الأعداد الملتحقة بالبرنامج خلال آخر ٣ سنوات)**	Increasing (√) Constant ( ) Decreasing ( )
-Final Exam results **نتائج الامتحان النهائي**	Passed 100 %
-Distribution of success grades (%) **توزيع تقديرات النجاح (%)**	Excellent ( ) Very good (4) good (1) Pass ( )

8- Academic standards **المعايير الأكاديمية**	
- Academic reference standards (ARS): **المعايير الأكاديمية المرجعية**	• Minia faculty of medicine adopted the general national academic reference standards provided by the national authority for quality assurance and accreditation of education (NAQAAE) for all postgraduate programs. (Faculty Council No. 182, decree No. 7163 dated:14/9/2009. • faculty Council decree No.7528, in its cession No.191, dated: 15\3\2010 •Then, General Surgery department has developed the academic standards (ARS) for Master (MSc) program in General Surgery
- Knowledge & Understanding: **المعلومات والمفاهيم**	**By the end of the study of Master program in General Surgery the candidate should be able to:** a.9 Explain the essential facts and principles of relevant basic sciences including Pathology, Anatomy, Histology and Physiology, pharmacology and biochemistry related to General Surgery. a.10 ecognize essential facts of clinically supportive sciences including General Surgery.

	a.11 dentify etiology, pathogenesis, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to General Surgery. a.12 dentify the basic ethical and medicolegal principles that should be applied in practice and are relevant to the General Surgery. a.13 dentify the basics and standards of quality assurance to ensure good clinical care practice in the field of General Surgery. a.14 dentify the ethical and scientific principles of medical research in General Surgery. a.15 xplain the impact of common health problems in the field of General Surgery on the society and how good clinical practice improves these problems. a.16 dentify recent advances techiques and procedursin the practice of General Surgery
- Intellectual skills **المهارات العقلية**	**By the end of the program the candidate should be able to:** b.1 Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the General Surgery. b.2 Solve problems of common clinical situations related to General Surgery using an investigatory and analytic thinking approach. b.3 Design a research study or review on common clinical problems relevant to the field of General Surgery. b.4 Formulate management plans and alternative decisions in different situations in the field of the General Surgery. b.5 Assess risk in professional practices in the

	field of General Surgery. b.6 Plan for the development of performance in the field of General Surgery. b.7 Combine knowledge for professional problems' solving. b.8 Assess common ethical dilemma and its proper sollution.
-Professional & practical/clinical skills: **المهارات المهنية والعملية**	**By the end of the program the candidate should be able to:** c.8 Carry out patient management plans (clinical diagnosis, investigations, and modality of treatment) for common conditions related to General Surgery. c.9 Use information technology to support patient care decisions and patient education in common clinical situations related to General Surgery. c.10 erform competently non invasive and invasive procedures considered essential for the General Surgery. c.11 rovide health care services aimed at preventing health problems related to General Surgery. c.12 rovide patient-focused care in common conditions related to General Surgery, while working with health care professionals, including those from other disciplines. c.13 rite competently all forms of patient charts and sheets including reports evaluating these charts and sheets. c.14 rgaize a proper medical report.
-General & transferable skills:	**By the end of the program the student**

المهارات العامة والمنقولة	**should have the ability to:** d.11 erform practice-based improvement activities using a systematic methodology d.12 erform data management including data entry and analysis using information technology to manage information, access online medical information; and support own education. d.13 aintain therapeutic and ethically sound relationship with patients. d.14 emonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices. d.15 ommunicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors. d.16 ractice cost-effective health care and resource allocation that does not compromise quality of care. d.17 ssist patients in dealing with system complexities. d.18 e aware of the importance of life-long self-learning and show a strong commitment to it. d.19 rganize material from different scientific sources including library, electronic and online resources. d.20 ealing effectively with unethical behavior of other members of healthcare team.

- Students' support system (students with limited capabilities & those with outstanding performance): **طرق دعم الطلاب (ذوي القدرات المحدودة والمتميزين)**	• Special sessions to explain any difficult part for students to understand • Different schedule according to their ability (putting time tables that not overlaps their teaching schedule) • Rewarding students who provide good seminars
-External reference standards for the program (Benchmark): **معايير القياس المرجعية للبرنامج**	• Minia faculty of medicine adopted the standards provided by "Accreditation council for graduate Medical Education" (http: acgme.org). (Date and NO. of faculty council approval). • Comparison between ARS of Master program in Minia faculty of medicine & External benchmarks.
-Program handbook: **دليل البرنامج**	Available (√) Not available ( )
-Program review process: **نظام المراجعة الدورية للبرنامج**	Available (√) Not available ( ) Annual ( ) More than one year ( )
- Achievement of program intended learning outcomes(ILOs) by academic program framework (by courses): **مدى توافق الهيكل الأكاديمي للبرنامج مع المستهدف من التعليم**	The matrix of program ILOs vs courses
-Administrative and regulatory constrains: **المعوقات الإدارية والتنظيمية**	• Cost and inavailabilty of Simulation-based education to allow training on complex procedures • Surgical trainees on rotating shifts are often not able to attend scheduled learning opportunities such as lectures, and tutorials • Lack of resources

9-Students assessments to measure achievement of program intended learning outcomes (ILOs)	
-Assessment tools/methods: **أدوات التقويم**	1. Research (Thesis) 2. Written Exams: Short essay MCQs Problem solving

	3.Practical Exams 4. Oral Exams 5.Seminars, presentations, assignments 6.log book
-Timetable/schedule: **المواعيد**	**<u>First Part</u>:** (≥6 months=1 semester): • At least six months after registration should pass before enrolling for the first part examination. • The exam is set twice a year in May and in October. • For the student to pass the first part exam, a score of at least 60% in each curriculum is needed. **<u>Second Part</u>:** (≥18months=3 semesters): • The student should pass the 1st part before he/she can ask for examination in the 2nd part, not more than 4 times. • Fulfilment of the requirements in each course is a prerequisite for candidates to be assessed and undertake part 1 and part 2 exams; as following: • Training courses • Case presentation • Seminars • Thesis discussion • Workshops • Conference attendance • Journal club • Two sets of exams: first in May—second in October. • At least 60 % of the written exam is needed to be admitted to the oral and practical exams. **<u>Thesis/essay</u>**: • Master thesis subject should be officially registered after registration for the Master degree and should be completed, defended and accepted after passing the second part final examination, not before 6 months from registering the subject.

	• One research in national journal should be pubished from the Master thesis and accepted at least oneonth before aking for the second part exam. • The duration of registered Master degree should not be more than 4 years till agreement of the Department council (after taking opinion of supervisors) and Faculty council.
-External evaluator comments: (if present) **ملاحظات المراجع الخارجي (إن وجدت)**	

10-Educational resources:

Ratio of teaching staff to student numbers **نسبه اعضاء هيئه التدريس على راس العمل الى الطلاب**	Sufficient
- Suitability of staff members specialties as well as distribution of teaching loads for program's needs **مدى ملائمة تخصصات أعضاء هيئة التدريس وتوزيع الأعباء عليهم طبقا لاحتياجات البرنامج**	Suitable ( ) Suitable to some extent (√) Non- Suitable ( ) (why?) …… …….. ……
-Library: **المكتبة**	Suitable ( ) Suitable to some extent (√) Non- Suitable ( ) (why?) …… …….. ……
-Laboratories/clinical places: **أماكن التدريب الاكلينيكي/المعامل**	Suitable ( ) Suitable to some extent (√) Non- Suitable ( ) (why?) …… …….. ……
-Computers/computer labs: **الحاسب الآلي**	Suitable ( ) Suitable to some extent (√) Non- Suitable ( ) (why?) …… …….. ……

-Collaboration with other organizations for offering students training opportunities: **مدى التعاون مع جهات الأعمال في توفير فرص التدريب للطلاب**	Collaboration with department of General Srgery at: Assuit university Ain shams university Mansoura University for Gastrointestinal Surgery and liver transplantation
-Other program requirements: **أي متطلبات أخرى للبرنامج**	TOEFL FLDP & ICTP courses and certificates.

11-Quality management & development system

ادارة الجودة والتطوير

- The follow up system for areas of Weakness: **نظام المتابعة لجوانب القصور**	Effective ( ) Effective to some extent (√) Not effective ( ) (Why?) …….. ……. ……. .
Implementation of faculty and university bylaws: **إجراءات تطبيق لوائح وقوانين الكلية والجامعة**	Suitable ( ) Suitable to some extent (√) Non- Suitable ( ) (why?) …….. ……. ……. .
-Effectiveness of internal evaluation/audit process in program development: **مدى فاعلية نظام المراجعة الداخلية في تطوير البرنامج**	Good
-External evaluators' comments on program ILOs and assessment standards: **ملاحظات المراجعين الخارجيين فيما يخص مخرجات البرنامج ومعايير القياس**	

12- Program development suggestions:

مقترحات تطوير البرنامج

-Program structure (courses / hours): **هيكل البرنامج (المقررات / الساعات)**	more practical hours including more subspecialities

-New courses: **مقررات جديدة**	--
-Training and skills: **التدريب والمهارات**	More training on minimally invasive surgical procedures and Simulation-based training for complex procedures
- Health sector/stockholders' suggestions for program development: **مقترحات قطاع الأعمال والجهات المعنية لتطوير البرنامج**	Thesis that help in solving community health problem
-Person in charge: **المسئول عن التنفيذ**	All staff members
-Time of execution **توقيت التنفيذ**	Some suggestion related to faculty by laws need time Others by the end of 2023

- **Action Plan:**

Actions Required	**Completion Date**	**Responsible Person**
According to instructions of postgraduate office	According to committees' schedule	**All staff members of Histology and cell biology department**
Setting up collaborations with specialized institutes which accommodate facilities	By 2024	
More seminars and work shops	By 2024	

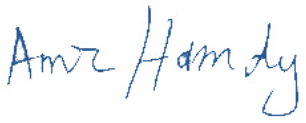
Program Coordinator:

1. Dr. Yasser Ali Kamal
2. Dr. Abdel-rahman Gamal Saleh
3. Dr. Mohamed Jamal El-sherif

Date of program specifications 1st approval by department council: / /

Date of last update & approval by department council: 5/3/2023

Head of Department: Professor Dr. Amr Hamdy



Section V:

OTHER REQUIREMENTS