

# MD Degree Programme and Courses Specification for vascular Surgery

---

(According to currently applied bylaws)

*Department of Surgery*

*Unit of vascular Surgery*

*Faculty of medicine*

*Minia University*

*2023*

# CONTENTS

<b>SECTION I: Programme Specification</b>
A- Basic Information
B- Professional information:
1. Programme aims
2. Intended Learning Outcomes (ILOs)
3. Programme Academic Reference Standards
4. Programme structure
5. Programme courses
6. Programme admission requirements
7. Regulations for progression and programme completion
8. Evaluation of programme intended learning outcomes
<b>SECTION II: Program Correlations</b>
Annex (1): Comparison between National Academic Quality Assurance & Accreditation (NAQAAE) General Academic Reference Standards (GARS) and Faculty Academic Reference Standards (ARS)
Annex (2): Comparison between Faculty Academic Reference Standards (ARS) and Program of MD degree in vascular Surgery
Matrix of Coverage of Course ILOs By Contents
<b>SECTION III: Course specifications</b>
Course (1) Use of Computer in Medicine
Course (2) Medical Statistics and Research Methodology
Course (3) Surgical Anatomy
Course (4): Surgical Pathology
Course (5): vascular Surgery
<b>SECTION IV: Course reports</b>
<b>SECTION V: Other requirements</b>

# **Section I**

# **Program Specification**

## **Department of Surgery**

**Degree: MD degree of vascular Surgery (VS100)**

**University: Minia**

**Faculty: Medicine**

**Department: Surgery**

**Last date of approval: 5/3 /2023**

### **A. Basic Information:**

- 1. Programme title:** MD degree of vascular Surgery
- 2. Final award:** MD of vascular Surgery
- 3. Programme type:** single      double      multiple
- 4. Responsible department:** Department of Surgery
- 5. Departments involved in the programme:** Department of Surgery, Community and public health department, and pathology department.
- 6. Programme duration:** 3.5 years (7 semesters)
- 7. Number of programme courses:** 5 courses (4 in the 1<sup>st</sup> part and one in the 2<sup>nd</sup> part)
- 8. Head of Department:** Prof. Dr. Amr Hamdy
- 9. Coordinator(s):** Prof. Osman Aboelceba
- 10. External evaluator:** Prof. Dr. Omar ELkashef
- 11. Programme management team:** --

### **B. Professional information:**

#### **1. Programme aims:**

**The aim of this program is to provide the candidate of MD degree in vascular surgery with:**

- 1- Recent and advanced surgical knowledge and skills essential for the mastery of the practice of vascular surgery according to the international standards.
- 2- Knowledge and skills necessary for further training and practice in the field of vascular surgery.
- 3- Skills necessary for proper diagnosis and management of patients including diagnostic, problem solving and decision making and operative skills.

- 4- Provision of sound ethical principles related to surgical practice.
- 5- Active participation in community needs assessment and problems identification.
- 6- Maintenance of learning abilities necessary for continuous medical education.
- 7- Upgrading research interest and abilities.

## **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 Identify the basics of computer use in medicine, medical statistics, and research methods which have scholarly importance in the field of vascular surgery.
- a.2 Describe the essential facts of surgical anatomy and surgical pathology related to the field of vascular surgery.
- a.3 Identify updates in the fields of computer use, medical statistics, research methods, surgical anatomy, and surgical pathology related to the field of vascular surgery.
- a.4 Describe the methods of medical research.
- a.5 Summarize the different types of study design.
- a.6 Identify the ethical rules related to medical research.
- a.7 Explain the ethical and medicolegal principles essential for practice of vascular surgery.
- a.8 Identify the basics and standards of quality assurance to ensure good professional practice in the field of vascular surgery.
- a.9 Identify the effects of the practice in vascular surgery on public health.
- a.10 Explain the methods to maintain and improve the public health through the practice of vascular surgery.

### **(b) Intellectual skills:**

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

- b.1 Correlate data acquired from different sources with the practice of vascular surgery.
- b.2 Interpret data acquired from different sources to reach reasonable conclusions important for the practice of vascular surgery.

b.3 Use available clinical data to solve the common practical problems in the field of vascular surgery.

b.4 Design a research study on common clinical problems or advanced procedures relevant to the field of vascular surgery.

b.5 Formulate scientific papers in the field of vascular surgery.

b.6 Assess risk in professional practices in the field of vascular surgery.

b.7 Plan to improve the performance and productivity in the field of vascular surgery.

b.8 Find solutions for different situations in the field of vascular surgery.

b.9 Present and defend research data in front of a panel of experts

b.10 Collaborate actively in the scientific conferences and seminars

b.11 Prepare teaching lectures according to scientific evidence.

b.12 Use the evidence-based approaches during scientific discussions.

**\* 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 Perform diagnostic and therapeutic procedures considered essential in the field of vascular Surgery.

c.2 Perform competently non invasive and invasive procedures considered essential for vascular Surgery.

c.3 Provide compassionate, appropriate, and effective level of patient care for uncomplicated and complicated conditions in vascular Surgery.

c.4 Write and evaluate all forms of medical reports.

c.5 Evaluate and develop methods and tools existing in the field of vascular Surgery.

c.6 Use information technology to support patient care decisions in the practice of vascular Surgery.

c.7 Plan for the development of the professional practice.

c.8 Role-play in developing the performance of others.

**(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 Communicate effectively with other health care professionals.

d.2 Order consultation or referral from other healthcare team members when needed.

d.3 Use the information technology to serve the development of professional practice in vascular surgery.

d.4 Teach students, residents and other health professionals effectively and evaluate their performance.

d.5 Assess himself and identify his personal learning needs.

d.6 Use all information resources information to address medical questions and improve knowledge.

d.7 Work effectively with others as a apart of a team and team's leadership.

d.8 Develop a strategy to improve the performance of other team memebers.

d.9 Manage scientific meetings administration according to the available time.

**3. Programme Academic Reference Standards:**

**3a-** Faculty of Medicine, Minia University 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 decree No.6854, in its cession No.177 Dated: 18\5\2009.).

-Minia faculty of medicine has developed the academic standards (ARS) for medical doctorate(MD) program and approved in faculty Council decree No.7528, in its cession No.191, dated: 15/3/2010, and these standards (faculty ARS) has been updated and approved in Council No. 52/2 dated 20/2/2023. {Annex 1}.

Then Vascular unit – general surgery department has developed these standards and developed the intended learning outcomes (ILOs) for Doctorate (MD) program in Vascular surgery and the Date of program specifications 1st approval by department council: dated: 13\5\2013) and the last update in department council: 6\3\2023. {Annex II}

**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 Doctorate degree of Vascular surgery programme- faculty of medicine- Minia University	remarks
المعرفة والفهم:1.		
1. المعرفة والفهم:	a.1, a.2, a.3, a.4, a.5, a.6	100%
أ- النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة	a.1, a.4, a.5, a.6	
ب- أساسيات ومنهجيات وأخلاقيات البحث العلمي وأدواته المختلفة	a.7	
ج- المبادئ الأخلاقية والقانونية للممارسة المهنية4 في مجال التخصص	a.8	
د- مبادئ وأساسيات الجودة في الممارسة المهنية4 في مجال التخصص	a.9, a.10	
هـ- المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية4 البيئة وصيانتها		100%
2. المهارات الذهنية :	b.1,b.2	
أ. تحليل وتقييم المعلومات في مجال التخصص والقياس عليها والاستنباط منها	b.3	
ب. حل المشاكل المتخصص استنادا على المعطيات المتاحة	b.4	
ج. إجراء دراسات بحثية4 تضيف إلى المعارف	b.5	
د. صياغة أوراق علمية	b.6	
ز. تقييم المخاطر في الممارسات المهنية	b.7	
س. التخطيط لتطوير الأداء في مجال التخصص	b.8	
و. اتخاذ القرارات المهنية في سياقات مهنية مختلفة	b.9,b.10,b.11,b.12	



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

**3c- Program External References:** None

#### **4. Programme structure:**

**Programme duration:** (3.5 years).

Subject	Hour/week		
	Lectur es	Practic al	Clinic al
<b>First part</b>			
Course (1) Use of Computer in Medicine	2	1	
Course (2) Medical Statistics and Research Methodology	1	1/2	
Course (3) Surgical Anatomy	2	-	
Course (4): Surgical Pathology	2	-	
<b>Second part</b>			
Course (5): vascular Surgery	10	6	

## 5. Programme courses

Course Title	Total No. of hours	No. of hours /week			Program ILOs  Covered
		Lect.	Practical	Tutorial	
FIRST PART (Level of course):					
Course (1) Use of Computer in Medicine	30	20	10	-	a.1.a.3, c.6, d.3
Course (2) Medical Statistics and Research Methodology	45	30	10	-	a.1, a.3, a.4, a.5, a.6, b.4,b.5,b.9,b.11, b.12
Course (3) Surgical Anatomy	30	-	-	-	a.2, a.3, b.1,b.2

Course (4): Surgical Pathology	30	-	-	-	a.2, a.3, b.1,b.2
--------------------------------------	----	---	---	---	-------------------

<b>Training programs and workshops, field visits, seminars&amp; other scientific activities</b>	continuous				a.2, a.7, a.8,a.9, a.10, b.3,b.5,b.7,b.8,b. 10, c.1, c.2,c.3,c.4, c.5,  c.7, c.8, d.1,d.2,d.4, d.5, d.6, d.7, d.8, d.9
---	------------	--	--	--	--

**SECOND PART (Level of course):**

<b>vascular Suregry</b>	960	600	360		a.2, a.7, a.8,a.9, a.10, b.1,b.2,b.3,b.5,b. 7, b.8,b.10, c.1,  c.2,c.3,c.4, c.5, c.7, c.8, d.1,d.2,d.4, d.5, d.6, d.7, d.8, d.9
<b>Training programs and workshops, field visits, seminars&amp; other scientific activities</b>	continuous				a.1, a.3, a.4, a.5, a.6, b.4,b.5,b.9,b.11, b.12, c.6, d.3

## **6. Programme admission requirements:**

### **I- General requirements:**

A-Candidates should have either:

1. MBChB Degree from any Egyptian Faculties of Medicine or
2. Equivalent Degree from Medical Schools abroad approved by the Ministry of Higher Education.

B- Master Degree in general or vascular surgery

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

### **II. Specific Requirements:**

A- Candidates graduated from Egyptian Universities should have at least “Good Rank” in their final year examination.

B-Master Degree in general or vascular surgery with at least “Good Rank”.

C- Candidate should know how to speak & write English well.

D- Candidate should know have computer skills.

## **7- Regulations for progression and programme completion**

Duration of program is 7 semesters (3.5 years), from registration till the end of the second part; divided to:

### **First Part:** ( $\geq 6$ months=1 semester):

- a. Program-related essential basic courses including: Use of computer in medicine; Medical Statistics and Research methods; Surgical anatomy; and Surgical Pathology
- b. At least six months after registration should pass before the student can ask for examination in the 1st part.
- c. Two sets of exams: 1st in April — 2nd in October.
- d. For the student to pass the first part exam, a score of at least 60% in each curriculum is needed.
- e. Those who fail in one course need to re-exam it only.

### **Second Part:** ( $\geq 24$ months=4 semesters):

- a. Program related specialized science of general surgery courses and ILOs. At least 24 months after passing the 1st part should pass before the student can ask for examination in the 2nd part.
- b. The candidate should pass the written exam (at least 60% score) to be admitted to the oral and practical exams.
- c. Four times of oral and practical exams are allowed before the student has to reattend the written exam.

**Third Part:** (24-48 months=4-8 semesters):

- a. MD thesis subject should be officially registered maximally one and half years from applying to the MD degree.
- b. Discussion and acceptance of the thesis should not be set before 24 months from registering the MD subject and maximally after 4 years.
- c. Thesis and at two published research papers from the thesis (one in National journal and another one in international journal) are required before discussion.

**8- Teaching and learning methods:**

- a- Lectures.**
- b- Practical training and demonstration weekly throughout the course.**
- a- Self-training activities such as research**
- b- Seminars, presentations and assignments.**
- c- Training courses & workshops.**
- d- Thesis discussion attendance.**
- e- Conference attendance**
- f- Clinical rounds**
- g- Surgery performance**

**9- Evaluation of programme intended learning outcomes:**

<b>Evaluator (By whom)</b>	<b>Method/tool</b>	<b>Sample</b>
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:**

<b>Method of assessment</b>	<b>The assessed ILOs</b>
1. Research (Thesis)	<b>a.</b> Knowledge & understanding,  <b>b.</b> Intellectual skills  <b>c.</b> Professional & practical skills  <b>d.</b> General & transferable skills

2. Written Exams: <ul style="list-style-type: none"> <li>Short essay</li> <li>MCQs</li> <li>Problem solving</li> </ul>	<ul style="list-style-type: none"> <li>a. Knowledge &amp; understanding</li> <li>b. Intellectual skills</li> </ul>
3. Practical/Clinical Exams: <ul style="list-style-type: none"> <li>Case sheet</li> </ul>	<ul style="list-style-type: none"> <li>a. Knowledge &amp; understanding</li> <li>b. Intellectual skills</li> <li>c. Professional &amp; practical skills</li> </ul>

<ul style="list-style-type: none"> <li>Case discussion</li> <li>OSCE</li> <li>Imaging slides</li> </ul>	
4. Seminars, presentations, assignments	<ul style="list-style-type: none"> <li>a. Knowledge &amp; understanding,</li> <li>b. Intellectual skills</li> <li>c. Professional &amp; practical skills</li> <li>d. General &amp; transferable skills</li> </ul>
5. Oral Exams	<ul style="list-style-type: none"> <li>a. knowledge &amp; understanding</li> <li>b. Intellectual skills</li> <li>c. General &amp; transferable skills</li> </ul>

**Head of Unit of vascular Surgery:**

Prof. Dr. Osman Aboelceba

**Head of the Surgery department:**

Prof. Dr. Amr Hamdy

*Amr Hamdy*

## **Section II**

# **Program Correlations**



## Program Correlations

مصفوفة توافق المعايير القومية القياسية العامة لبرامج الدكتوراة مع المعايير الأكاديمية المعتمدة من كلية الطب – جامعة المنيا لدرجة الدكتوراة في جراحة الاوعية الدموية

### Annex (1): Comparison between National Academic Quality Assurance & Accreditation

#### (NAQAAE) General Academic Reference Standards (GARS) and Faculty Academic Reference Standards (ARS)

<p>المعايير القياسية العامة: ٢</p> <p>NAQAAE General Academic Reference Standards “GARS” for MD Programs</p>	<p>2. Faculty Academic Reference Standards (ARS) for MD Program</p>
<p>المعرفة والفهم: 2.1.</p> <p>بالتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على الفهم والدراسة بكل من:</p>	<p>2.1. Knowledge and understanding:</p> <p>Upon completion of the doctorate Program (MD), the graduate should have sufficient knowledge and understanding of:</p>
<p>النظريات والأساسيات ١، ١، ٢ والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة</p>	<p>2.1.1. Theories, basics and updated knowledge in his scholarly field and related basic sciences.</p>
<p>أساسيات ومنهجيات ٢، ١، ٢ وأخلاقيات البحث العلمي وأدواته المختلفة</p>	<p>2.1.2. Basic, methods and ethics of medical research.</p>
<p>المبادئ الأخلاقية والقانونية ٣، ١، ٢ للممارسة المهنية في مجال التخصص</p>	<p>2.1. 3. Ethical and medicolegal principles of medical practice.</p>
<p>مبادئ وأساسيات الجودة ٤، ١، ٢ في الممارسة المهنية في مجال التخصص</p>	<p>2.1. 4. Identify Principles and fundamental of quality in professional medical practice.</p>
<p>المعارف المتعلقة بآثار ٥، ١، ٢ ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها</p>	<p>2.1.5. Knowledge related to effects of professional practice on public health and methods of maintenance and system-based improvement of public health.</p>

<p>. المهارات الذهنية: ٢, ٢</p> <p>بانتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على:</p>	<p><b>2.2. Intellectual skills:</b></p> <p>Upon completion of the doctorate program (MD), the graduate must be able to:</p>
<p>. تحليل وتقييم المعلومات في ١, ٢, ٢ مجال التخصص والقياس عليها والاستنباط منها</p>	<p><b>2.2.1 Analysis and evaluation of information to correlate and deduce from it.</b></p>
<p>. حل المشاكل المتخصصة ٢, ٢, ٢ استنادا على المعطيات المتاحة</p>	<p><b>2.2.2. Problem solving skills based on analysis of available data for common health problems related to his scholarly field.</b></p>
<p>. إجراء دراسات بحثية ٣, ٢, ٢ تصنيف إلى المعارف</p>	<p><b>2.2.3. Carryout research projects related to his scholarly field.</b></p>
<p>. صياغة أوراق علمية ٤, ٢, ٢</p>	<p><b>2.2.4. Write and publish scientific papers.</b></p>
<p>. تقييم المخاطر في ٥, ٢, ٢ الممارسات المهنية</p>	<p><b>2.2.5. Assess risk in professional medical practice.</b></p>
<p>. التخطيط لتطوير الأداء في ٦, ٢, ٢ مجال التخصص</p>	<p><b>2.2.6. Establish goals, commitments and strategies for improved productivity and performance.</b></p>
<p>. اتخاذ القرارات المهنية في ٧, ٢, ٢ سياقات مهنية مختلفة</p>	<p><b>2.2.7. Making professional decisions in different professional contexts.</b></p>
<p>. الابتكار/ الإبداع ٨, ٢, ٢</p>	<p><b>2.2.8. Demonstrate intellectual curiosity necessary for scientific discovery and innovation through active participation in research.</b></p>
<p>. الحوار والنقاش المبني ٩, ٢, ٢ على البراهين والأدلة</p>	<p><b>2.2.9. Using Evidence-based strategies to during discussion or teaching others.</b></p>

مهارات المهنة: 2.3. بإنتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على:	<b>2.3. Professional skills:</b>  Upon completion of the doctorate program (MD), the graduate must be able to:
إتقان المهارات المهنية 2.3.1. الأساسية والحديث في مجال التخصص	<b>2.3.1. Master the basic as well as modern professional practical and/or clinical skills.</b>
. كتابة وتقييم التقارير 2.3. ٢ المهنية	<b>2.3.2. Write and evaluate professional reports.</b>
. تقييم وتطوير الطرق 3.3. ٢ والأدوات القائمة في مجال التخصص	<b>2.3.3. Evaluate and improve the methods and tools in the specific field</b>
. استخدام الوسائل ٢, ٣, ٤ التكنولوجية بما يخدم الممارسة المهنية	<b>2.3.4. use of technological means to serve Professional practice</b>

التخطيط لتطوير الممارسة 5.3.2. المهنية وتنمية أداء الآخرين.	<b>2.3.5. Planning for the development of professional practice and improve of the performance of others</b>
. المهارات العامة والمنتقلة: ٢, ٤.  بإنتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على:	<b>2.4. General and transferable skills</b>  Upon completion of the doctorate program (MD), the graduate must be able to:
. التواصل الفعال بؤنواعه ١, ٤ ٢. الم ختلفة	<b>2.4.1. Communicate (in writing and orally) effectively and respectfully with peers, faculty, colleagues, and other members of the healthcare team, understanding the role of consultations and referrals.</b>
. استخدام تكنولوجيا ٢, ٤, ٢ المعلومات ب ما يخدم تطوير الممارسة المهنية	<b>2.4.2. Use of information technology to serve Professional Practice Development.</b>
. تعليم الآخرين وتقييم أداءهم ٢, ٤, ٣	<b>2.4.3. Demonstrate effective teaching and evaluating others.</b>

<p>. التقييم الذاتي والتعلم ٤,٢ . ٤. المست مر</p>	<p>2.4.4. Self-assessment and continuous learning.</p>
<p>. استخدام المصادر المختلفة ٥,٤,٢ للحصول على المعلومات . والمعارف</p>	<p>2.4.5. use physical information resources (print, analog), online (electronic, digital,) text, audio-video, book and journal to  address medical questions and knowledge to sustain professional growth</p>
<p>. العمل في فريق وقيادة فرق 2.4.6 العمل</p>	<p>2.4.6. Work as a member in larger teams and as well as a team leader knowshow to develop "teaming strategy" to plan how people will act and work together.</p>
<p>. 7. إدارة اللقاءات العلمية 2.4 والقدرة علي إدارة الوقت</p>	<p>2.4.7. Manage of scientific meetings and the ability to manage Time effectively.</p>

**Annex (2): Comparison between Faculty Academic Reference Standards (ARS) and ILOs of Program of MD degree in vascular Surgery**

2. Faculty Academic Reference Standards (ARS) for MD Program	ILOs of Program of Doctor degree (MD) in vascular Surgery
<p><b>2.1. Knowledge and understanding:</b></p> <p><b>Upon completion of the doctorate Program (MD), the graduate should have sufficient knowledge and understanding of:</b></p>	<p><b>A. Knowledge and understanding:</b></p>
<p>2.1.1. Theories, basics and updated knowledge in his scholarly field and related basic sciences.</p>	<p>a.1 Identify the basics in computer use, medical statistics, and research methods which have scholarly importance in the field of vascular surgery.</p> <p>a.2 Describe the essential facts in surgical anatomy and surgical pathology related to the field of vascular surgery.</p> <p>a.3 Identify updates in the fields of computer use, medical statistics, research methods, surgical anatomy, and surgical pathology related to the field vascular surgery.</p>
<p>2.1.2. Basic, methods and ethics of medical research.</p>	<p>a.4 Describe the methods of medical research</p> <p>a.5 Summarize the different types of study design</p> <p>a.6 Identify the ethical rules related to medical research</p>
<p>2.1. 3. Ethical and medicolegal principles of medical practice.</p>	<p>a.7 Explain the ethical and medicolegal principles essential for practice of vascular surgery.</p>
<p>2.1. 4. Identify Principles and fundamental of quality in professional medical practice.</p>	<p>a.8 Identify the basics and standards of quality assurance to ensure good professional practice in the field of vascular surgery.</p>

2.1.5. Knowledge related to effects of professional practice on public health and methods of maintenance and system-based improvement of public health.	<p>a.9 Identify the effects of the practice in vascular surgery on public health</p> <p>a.10 Explain the methods to maintain and improve the public health through the</p>
	practice of vascular surgery.
2.2. Intellectual skills:  Upon completion of the doctorate program (MD), the graduate must be able to:	B. Intellectual skills:
2.2.1 Analysis and evaluation of information to correlate and deduce from it.	<p>b.1 Correlate data acquired from different sources with the practice of vascular surgery.</p> <p>b.2 Interpret data acquired from different sources to reach reasonable conclusions</p> <p>important for the practice of vascular surgery.</p>
2.2.2. Problem solving skills based on analysis  of available data for common health problems related to his scholarly field.	b.3 Use available clinical data to solve the common practical problems in the field of vascular surgery.
2.2.3. Carryout research projects related to his scholarly field.	<p>b.4 Design a research study on common clinical problems or advanced procedures relevant to the field of vascular</p> <p>surgery.</p>
2.2.4. Write and publish scientific papers.	b.5 Formulate scientific papers in the field of vascular surgery.
2.2.5. Assess risk in professional medical practice.	b.6 Assess risk in professional practices in the field of vascular surgery.
2.2.6. Establish goals, commitments and strategies for improved productivity and performance.	b.7 Plan to improve the performance and productivity in the field of vascular surgery.
2.2.7. Making professional decisions in different professional contexts.	b.8 Find solutions for different situations in the field of vascular surgery.

2.2.8. Demonstrate intellectual curiosity necessary for scientific discovery and innovation through active participation in research.	<p>b.9 Present and defend research data in front of a panel of experts</p> <p>b.10 Collaborate actively in the scientific conferences and seminars</p>
2.2.9. Using Evidence-based strategies to during discussion or teaching others.	<p>b.11 Prepare teaching lectures according to scientific evidence.</p> <p>b.12 Use the evidence-based approaches</p>

	during scientific discussions.
<b>2.3. Professional skills:</b>  <b>Upon completion of the doctorate program (MD), the graduate must be able to:</b>	<b>C. Professional skills:</b>
2.3.1. Master the basic as well as modern professional practical and/or clinical skills.	<p>c.1 Perform diagnostic and therapeutic procedures considered essential in the field of vascular Surgery.</p> <p>c.2 Perform competently non invasive and invasive procedures considered essential for vascular Surgery.</p> <p>c.3 Provide compassionate, appropriate, and effective level of patient care for uncomplicated and complicated conditions in vascular Surgery.</p>
2.3.2. Write and evaluate professional reports.	c.4 Write and evaluate all forms of medical reports.
2.3.3. Evaluate and improve the methods and tools in the specific field	c.5 Evaluate and develop methods and tools existing in the field of vascular Surgery.
2.3.4. Use of technological means to serve Professional practice	c.6 Use information technology to support patient care decisions in the practice of vascular Surgery.
2.3.5. Planning for the development of professional practice and improve of the performance of others	<p>c.7 Plan for the development of the professional practice.</p> <p>c.8 Role-play in developing the performance of others.</p>

<b>2.4. General and transferable skills:</b>  <b>Upon completion of the doctorate program (MD), the graduate must be able to:</b>	<b>D. General and transferable skills:</b>
2.4.1. Communicate (in writing and orally) effectively and respectfully with peers, faculty, colleagues, and other members of the healthcare team, understanding the role of consultations and referrals.	d.1 Communicate effectively with other healthcare professionals.  d.2 Order consultation or referral from other healthcare team members when needed.
2.4.2. Use of information technology to serve	d.3 Use the information technology to serve
Professional Practice Development.	the development of professional practice in vascular surgery.
2.4.3. Demonstrate effective teaching and evaluating others.	d.4 Teach students, residents and other health professionals effectively and evaluate their performance.
2.4.4. Self-assessment and continuous learning.	d.5 Assess himself and identify his personal learning needs.
2.4.5. use physical information resources (print, analog), online (electronic, digital,) text, audio-video, book and journal to address medical questions and knowledge to sustain professional growth	d.6 Use all information resources information to address medical questions and improve knowledge.
2.4.6. Work as a member in larger teams and as well as a team leader knowshow to develop "teaming strategy" to plan how people will act and work together.	d.7 Work effectively with others as a a part of a team and team's leadership.  d.8 Develop a strategy to improve the performance of other team memebbers.
2.4.7. Manage of scientific meetings and the ability to manage time effectively.	d.9 Manage scientific meetings administration according to the available time.



Annex III : Matrix of coverage of program ILOs by Methods of Teaching and Learning (Annex III)

Teaching and learning methods	The assessed ILOs
<ul style="list-style-type: none"> <li>Lectures</li> </ul>	a1, a2, a3, a4, a5, a6, a7, b1, b2, b3, b4, b5, b6, b7.
<ul style="list-style-type: none"> <li>Thesis</li> </ul>	a1, a2, a3, a4, a5, a6, a7, b1, b2, b3, b4, b5, b6, b7 c1, c2, c3, c4, c5, c6, c7, d1, d2, d3, d4, d5, d6, d7, d8.
<ul style="list-style-type: none"> <li>Practical sessions:</li> </ul> <p>1-Observation of different light microscopic slides</p> <p>1- Light microscopic slides preparation and examination</p> <p>2- Statistical analysis of different data.</p>	c1, c2, c3, c4, c5, c6, c7, d2, d3, d6, d7, d8
<ul style="list-style-type: none"> <li>Self-training activities seminars, presentations &amp; assignments.</li> <li>Training courses &amp; workshops.</li> <li>Thesis discussion attendance.</li> <li>Conference attendance</li> </ul>	d1, d2, d3, d4, d5, d6, d7, d8

Annex IV: Matrix of coverage of program ILOs by Methods of assessment

Method of assessment	The assessed ILOs
1. Paper based Exams: <ul style="list-style-type: none"> <li>• Short essay</li> <li>• MCQs</li> <li>• Problem solving</li> </ul>	a1, a2, a3, a4, a5, a6, a7, b1, b2, b3, b4, b5, b6, b7.
2. Practical and clinical Exams: 3. Exams: <ul style="list-style-type: none"> <li>a. Case sheet</li> <li>b. Case discussion</li> <li>c. OSCE and Imaging slides operative</li> </ul>	c1, c2, c3, c4, c5, c6, c7, d2,d3,d6,d7,d8
4. Oral Exams	a1, a2, a3, a4, a5, a6, a7, b1, b2, b3, b4, b5, b6, b7, d1,d3,d5

University: MINIA, Department: Surgery , Faculty(s): MEDICINE

**Program: MD in vascular Surgery (VS100) Matrix of Coverage of Course ILOs By Contents**

[illegible]

## **Section III**

# **Course Specifications**

# Course (1)

**Course specification of :**  
**“Use of Computer in Medicine”**  
**in MD degree**

**University: Minia**

**Faculty: Medicine**

**Department offering the course: Public health and preventive medicine department**

**Department offering the programme: Department of Surgery**

**Programme(s) on which the course is given: First part MD for Vascular surgery**

**Academic year/ Level: First part of MD**

1. Course Information		
<b>Academic Year/level:</b>  <b>First part MD</b>	<b>Course Title:</b>  <b>Use of Computer in Medicine</b>	<b>Code:</b>  <b>VS100</b>
<ul style="list-style-type: none"><li>• <b>Number of teaching hours:</b><ul style="list-style-type: none"><li>- <b>Lectures: 20 hours</b></li><li>- <b>Practical/clinical: 10 hours</b></li><li>- <b>Total: 30 hours</b></li></ul></li></ul>		
<b>2. Overall Aims of the course</b>	<i>By the end of the course the student must be able to:</i> <ol style="list-style-type: none"><li><b>1. Recognize knowledge about the software and their applications in Medicine</b></li><li><b>2. Gain skills necessary for using and managing health care information systems</b></li></ol>	

**3. Intended learning outcomes of course (ILOs):**

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

<b>A. Knowledge and understanding</b>	<b>A.1. Define each part of computer hardware and its function</b>  <b>A.2. Have a basic understanding of various computer applications in medicine - for instruction, information managing, and computer based medical record, etc.</b>  <b>A.3. Define telemedicine and its importance</b>  <b>A.4. Recognize importance of health information technology in improvement of healthcare</b>  <b>A.5. Describe electronic medical records and obstacles facing it</b>  <b>A.6. Identify the concept of big data analysis</b>		
<b>B. Intellectual Skills</b>	<b>B.1. Criticize adoption of telemedicine</b>  <b>B.2. Discover factors constraining adoption of telemedicine</b>		
<b>C. Professional and Practical Skills</b>	<b>C.1. Design framework for understanding of health information system performance</b>		
<b>D. General and transferable Skills</b>	<b>D.1. Utilize computers in conducting research</b>  <b>D.2. Appraise adoption of telemedicine</b>  <b>D.3. Discover skills to carry out the process of improving health information system performance</b>		
<b>4. Course Contents</b>			
<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Tutorial/ Practical</b>
<b>Use of Computer in Medicine</b>			
<b>General concepts</b>	<b>6</b>	<b>4</b>	<b>2</b>
<b>Introduction to Microsoft PowerPoint</b>			
<b>Health Information Systems (HIS)</b>	<b>6</b>	<b>4</b>	<b>2</b>

<b>Telemedicine</b>	<b>6</b>	<b>4</b>	<b>2</b>
<b>Software Used in the Health Care</b>	<b>6</b>	<b>4</b>	<b>2</b>

Big Data Analysis in Health	6	4	2
Total	30	20	10
5. Teaching and Learning Methods	Since COVID-19 pandemic, blended learning approach was adopted that mixes virtual face-to-face interaction activities with the online learning. 60% of study method is offline and 40% of study is online  Online learning materials are available at Minia University site <ul style="list-style-type: none"><li>▪ Lectures: Face to face lectures, Pre-recorded video lectures</li><li>▪ Practical lessons</li><li>▪ Assignment</li><li>▪ Online quizzes</li></ul>		
6. Teaching and Learning Methods for students with limited Capacity	<ul style="list-style-type: none"><li>• Outstanding student rewarded certificate of appreciation due to high level of achievement</li><li>• Limited students divided into small group to make learning more effective</li></ul>		
7. Student Assessment			
A. Student Assessment Methods	7.1- Research assignment: to assess general transferable skills, intellectual skills.  7.2- Written exams: <ul style="list-style-type: none"><li>• Short essay: to assess knowledge.</li><li>• Commentary: to assess intellectual skills.</li></ul> 7.3- Practical Exams: to assess practical skills, intellectual skills.  7.4- Oral Exams: Oral exams to assess knowledge and understanding, attitude, communication  7.5- Structured oral exams: to assess knowledge.		



<b>B. Assessment Schedule (Timing of Each Method of Assessment)</b>	<b>Assessment 1: Final written exam week: 24-28</b>  <b>Assessment 2: Oral exam week: 24-28</b>  <b>Assessment 3: Practical exam week: 24-28</b>
<b>C. Weighting of Each Method of Assessment</b>	<b>Final Written Examination 100%</b>  <b>Oral Examination 100%</b>  <b>Practical Examination 100%</b>  <b>Total 100%</b>
<b>8. List of References</b>	
<b>A. Course Notes/handouts</b>	<b>Department notes, lectures and handouts</b>
<b>B. Essential Books</b>	<b>Essential Medical Statistics, Betty R. Kirkwood and J. A. Sterne (2000), 2nd edition</b>
<b>C. Recommended Textbooks</b>	<b>Data Management and Analytics for Medicine and Healthcare: Begoli, Edmon, Fusheng Wang, and Gang Luo. Springer, 2017.</b>
<b>D. Periodicals, websites</b>	<ul style="list-style-type: none"> <li>- <b>National Institutes of Health:</b> <a href="http://www.nih.gov">http://www.nih.gov</a></li> <li>- <b>American Medical Informatics Association:</b> <a href="http://www.amia.org/">http://www.amia.org/</a></li> </ul>

○ **Course Coordinators:**

➤ **Coordinators:**

1) **Lecturers: Dr / Shaimma Mahmoud, Dr/ Chrestina**

**Monir 2(Assistant coordinator: Assistant lecture Shaza Fadel**

○ **Head of department: Professor Dr. Nashwa Nabil Kamal**

**Date of program specifications 1<sup>st</sup> approval by department council: 13 /5/2013.**

**Date of last update & approval by department council: 6/ 3 / 2023**

MD degree of Neurosurgery	مسمى المقرر
VS 100	كود المقرر

#### A. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	Week No.	Intended Learning Outcomes (ILOs)			
		A. Knowledge & Understandi ng	B. Intellectual Skills	C. Professiona l & Practical skills	D. General & Transferable Skills
		A	B	C	D
Use of Computer in Medicine					
General concepts Introduction to Microsoft PowerPoint		A.1, A.2,			D.1
Health Information Systems (HIS)		A.4, A.5		C1	D.3
Telemedicine		A.3	B.1, .2		D.2
Software Used in the Health Care		A.5, A.6			D.1
Big Data Analysis in Health		A.6			

### 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	A.1 to A.6	B.1,		
Practical			C1	
Assignment	A.4	B.2		D1.D.2,D3

### 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 paper based exam	A.1, to A.6	B.1		
Practical computer exam (For SPSS, PowerPoint)			C1	D.1
Oral Exam	A.4, A..6	B.2	C.1	D.2, D.3

- Course Coordinators
- Lecturers: Dr / Shaimma Mahmoud, Dr/ Chrestina Monir 2(Assistant coordinator: Assistant lecture Shaza FadelHead of Department: Professor Nashwa Nabil Kamal

*Nashwa N. Kamal*

**Date of program specifications 1<sup>st</sup> approval by department council: 13 /5/2013.**

**Date of last update & approval by department council: 6/ 3 / 2023**

**Test blueprint for Uses of computer in Medicine course**

**for 1<sup>st</sup> part MD vascular Surgery- Code:VS100**

Topic	Hour	% of topic	Total No. of items	Written exam (100 marks)		Marks	Modified marks
				Knowledge	Intellectual		
Use of Computer in Medicine							
General concepts Introduction to Microsoft PowerPoint	4	20%	6	4	2	30	30
Health Information Systems (HIS)	4	20%	4	4		20	15
Telemedicine	4	20%	6	2	4	25	30
Software Used in the Health Care	4	20%	5	4	1	20	15
Big Data Analysis in Health	4	20%	1	1		5	10
Total	20	100%	20			100	100

## Course (2)

Course specification of:

***“Medical Statistics and Research Methodology”***

In MD degree

**University:** Minia

**Faculty:** Medicine

**Department offering the course:** Public health and preventive medicine department

**Department offering the programme:** Department of Surgery **Programme(s) on which the course is given:** First part MD for vascular Surgery

**Academic year/ Level:** First part of MD

1. Course Information		
Academic Year/level:  <b>First part MD</b>	Course Title:  <b>Medical Statistics and Research Methodology</b>	Code:  <b>VS 100</b>
<b>Number of teaching hours:</b> <ul style="list-style-type: none"><li>- <b>Lectures:</b> 30 hours</li><li>- <b>Practical/clinical:</b> 15 hours</li><li>- <b>Total:</b> 45 hours</li></ul>		

<b>2. Overall Aims of the course</b>	<p><b><i>By the end of the course the student must be able to:</i></b></p> <ol style="list-style-type: none"> <li>1. Gain skills necessary for proper practice in the field of Research Methods including diagnostic, problem solving and decision making skills.</li> <li>2. Apply ethical principles of scientific research with good awareness about patient's rights.</li> <li>3. Use precisely the research methodology in researches</li> </ol>
--------------------------------------	---

	<ol style="list-style-type: none"> <li>4. Influence the students to adopt an analytical thinking for evidence-based medicine</li> <li>5. Enable graduate students to use statistical principles to improve their professional work and develop the concept of critical interpretation of data</li> <li>6. To use precisely computer programs SPSS, Epi Info and Excel in data analysis</li> </ol>
<b>3. Intended learning outcomes of course (ILOs):</b>  <b><i>Upon completion of the course, the student should be able to:</i></b>	
<b>A. Knowledge and understanding</b>	<ol style="list-style-type: none"> <li>A.1. Define terms of research methodology .</li> <li>A.2. Describe the spectrum of research methodology .</li> <li>A.3. Explain the strategies and design of research .</li> <li>A.4. Describe the study design, uses, and limitations .</li> <li>A.5. Explain evidence-based Medicine</li> <li>A.6. Define causation and association .</li> <li>A.7. Tell the principles and fundamentals of ethics.</li> <li>A.8. Describe the different sampling strategies</li> <li>A.9. Summarize the advantages and disadvantages of different sampling strategies</li> <li>A.10. Summarize different methods of sample size calculation</li> <li>A.11. Recognize the sources and the recent methods in data collection and analysis.</li> <li>A.12. Identify the types of variables</li> <li>A.13. Identify types of tabular and graphic presentation of data</li> <li>A.14. Describe the normal curves and its uses</li> <li>A.15. Identify the characters of normal distribution curve</li> </ol>

	<p>A.16. Identify measures of central tendency and measures of dispersion</p> <p>A.17. Explain regression analysis, its use and differentiate its types</p> <p>A.18. Define the screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests</p> <p>A.19. Explain the usefulness of screening tests</p>
<b>B. Intellectual Skills</b>	<p>B.1. Apply research methods to different community health problems.</p> <p>B.2. Apply appropriate research strategies for use .</p> <p>B.3. Select appropriate research methods .</p> <p>B.4. Teach and advocate appropriately in the research design.</p> <p>B.5. Describe the normal curves</p> <p>B.6. Describe and summarize data</p> <p>B.7. Select the proper test of significance for a specific data.</p> <p>B.8. Interpret selected tests of significance and the inferences obtained from such tests</p>
<b>C. Professional and Practical Skills</b>	<p>C.1. Plan a research proposal for community diagnosis.</p> <p>C.2. Design questionnaires.</p> <p>C.3. Conduct research.</p> <p>C.4. Judge association and causation.</p> <p>C.5. Criticize for bias and confounding factors</p> <p>C.6. Design data entry file</p> <p>C.7. Validate data entry</p> <p>C.8. Manage data files</p> <p>C.9. Construct tables and graphs</p> <p>C.10. Calculate different samples sizes</p>



	C.11. Calculate measures of central tendency and measures of dispersion		
	C.12. Calculate sensitivity, specificity, and predictive values		
<b>D. General and transferable Skills</b>	D.1. Lead a research team to conduct a specific study .  D.2. Take part and work coherently with his associates to in research.  D.3. Write scientific papers.  D.4. Appraise scientific evidence  D.5. Analyze and interpret data  D.6. Use standard computer programs for statistical analysis effectively		
<b>4. Course Contents</b>			
<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Tutorial/ Practical</b>
<b><i>Research methods</i></b>			
<b><u>Introduction :</u></b>  - Introduction to research.  - Terminology and Rationale  - Originality		3	
<b>- Study design :</b>  -Cross sectional study and the prevalence rate  -Cohort study, incidence rate, relative & attributable risk  -Case-control study, Odd's ratio sampling  -Experimental study and clinical trials		4	
<b>- Sources of Errors in Medical Research</b>  <b>- Bias and confounding and its Control.</b>		3	

- Validity and reliability		2	
- The questionnaire design		2	
- Writing the Research Paper or Manuscript - Protocol Writing		2	2
- Critic technique for the literature review		2	2
- Association and causation		1	
- Evidence -based approach in medical practice		2	1
- Ethics of medical research		2	
<b>Statistics</b>			
Sampling		1	
Introduction to Sample Size Calculation		1	1
Data presentation		1	1
Tests of significance		2	
Introduction to SPSS		1	1
Proportion test			1
Chi-square test			1
Student T test, Paired T test			1
ANOVA test			1
Correlation (simple and multiple)			1
Regression			1
Screening		1	1
<b>Total</b>		<b>30</b>	<b>15</b>
<b>5. Teaching and Learning Methods</b>	Since COVID-19 pandemic, blended learning approach was adopted that mixes virtual face-to-face interaction activities with the online learning. 60% of study method is offline and 40% of		

	<p><b>study is online</b></p> <p><b>Online learning materials are available at Minia University site</b></p> <ul style="list-style-type: none"> <li>▪ Lectures: Face to face lectures, Pre-recorded video lectures</li> <li>▪ Practical lessons</li> <li>▪ Assignment</li> <li>▪ Online quizzes</li> </ul>
<b>6. Teaching and Learning Methods for students with limited Capacity</b>	<ul style="list-style-type: none"> <li>• Outstanding student rewarded certificate of appreciation due to high level of achievement</li> <li>• Limited students divided into small group to make learning more effective</li> </ul>
<b>7. Student Assessment</b>	
<b>D. Student Assessment Methods</b>	<p><b>7.1- Research assignment:</b> to assess general transferable skills, intellectual skills.</p> <p><b>7.2- Written exams:</b></p> <ul style="list-style-type: none"> <li>• Short essay: to assess knowledge.</li> <li>• Commentary: to assess intellectual skills.</li> </ul> <p><b>7.3- Practical Exams:</b> to assess practical skills, intellectual skills.</p> <p><b>7.4- Oral Exams:</b> Oral exams to assess knowledge and understanding, attitude, communication</p> <p><b>7.5- Structured oral exams:</b> to assess knowledge.</p>
<b>E. Assessment Schedule (Timing of Each Method of Assessment)</b>	<p>Assessment 1: Final written exam week: 24-28</p>

	<p>Assessment 2: Oral exam week: 24-28</p> <p>Assessment 3: Practical exam week: 24-28</p>
<b>F. Weighting of Each Method of Assessment</b>	<ul style="list-style-type: none"> <li>- Final Written Examination 100%</li> <li>- Oral Examination 100%</li> <li>- Practical Examination 100%</li> <li>- Total 100%</li> </ul>
<b>8- List of References</b>	
<b>A. Course Notes/handouts</b>	<ul style="list-style-type: none"> <li>- Department notes, lectures and handouts</li> </ul>
<b>B. Essential Books</b>	<ul style="list-style-type: none"> <li>- The Lancet Handbook of Essential Concepts in Clinical Research</li> </ul>
<b>C. Recommended Textbooks</b>	<p><b><u>Research methods:</u></b></p> <ul style="list-style-type: none"> <li>- <b>Introducing Research Methodology;</b> A Beginner's Guide to Doing a Research Project</li> <li>- <b>Understanding Clinical Research,</b> Renato Lopes and Robert Harrington; ISBN-10: 0071746781   ISBN-13: 978-0071746786</li> <li>- <b>Users' guides to the medical literature: a manual for evidence-based clinical practice:</b> Guyatt, G., D. Rennie, M. Meade and D. Cook (2002), AMA press Chicago.</li> <li>- <b>Research Methods in Community Medicine:</b> Surveys, Epidemiological Research, Programme Evaluation, Clinical Trials, 6th Edition Joseph Abramson, Z. H. Abramson</li> </ul> <p><b><u>Computer:</u></b></p>

	<ul style="list-style-type: none"> <li>- Discovering statistics using IBM SPSS statistics, Field, A. (2013). sage.</li> <li>- Medical Statistics: A Guide to SPSS, Data Analysis and Critical Appraisal, Belinda Barton, Jennifer Peat - 2nd Edition Everitt, Brian S.</li> <li>- Medical statistics from A to Z: a guide for clinicians and medical students. Cambridge University Press, 2021.</li> <li>- Bowers, David. Medical statistics from scratch: an introduction for health professionals. John Wiley &amp; Sons, 2019.</li> <li>- Aviva, P. (2005): Medical Statistics at a Glance, Blackwell Company, 2nd , ed., Philadelphia</li> </ul>
<b>D. Periodicals, websites</b>	<ul style="list-style-type: none"> <li>- <a href="https://phrp.nihtraining.com/users/login.php">https://phrp.nihtraining.com/users/login.php</a></li> <li>- <a href="http://www.jhsph.edu/">http://www.jhsph.edu/</a></li> <li>- Journal of Biomedical Education</li> <li>- <a href="https://lagunita.stanford.edu/courses/Medicine/MedStats-SP/SelfPaced/about?fbclid=IwAR3nfirLM4wnuEggUjLjk8TCR7IzPdnpGqwin06L-GjFq32a62w3j6R5s9c">https://lagunita.stanford.edu/courses/Medicine/MedStats-SP/SelfPaced/about?fbclid=IwAR3nfirLM4wnuEggUjLjk8TCR7IzPdnpGqwin06L-GjFq32a62w3j6R5s9c</a></li> </ul>

○ **Course Coordinators:**

➤ **Coordinators:**

**Lecturers: Dr / Chrestina Monir, Dr Shaimma Mahmoud**


**Assistant Coordinator: Assis .lecturer Shaza Fadel**

**Head of Department:**

**Professor Dr. Nashwa Nabil Kamal**

**Date of program specifications 1<sup>st</sup> approval by department council: 13 /5/2013.**

**Date of last update & approval by department council: 6 / 3 / 2023**



نموذج رقم (11)

جامعة: المنيا

كلية / معهد: الطب

قسم: الصحة العامة والطب الوقائي

Medical Statistics and Research Methodology	مسمى المقرر
VS 100	كود المقرر

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
<u>Introduction</u> : - - Introduction to research. - Terminology and Rationale - Originality		A.1, A.2,			

<b>- Study design :</b>  -Cross sectional study and the prevalence rate  -Cohort study, incidence rate, relative & attributable risk  -Case-control		A.3, A.4,	B.1, B.2, B.3, B.4,	C.1,	
---	--	-----------	------------------------	------	--



study, Odd's ratio sampling  - Experiment al study and clinical trials					
- <b>Sources of Errors in Medical Research</b>  - <b>Bias and confounding and its Control.</b>			B.3,	C.5	
- <b>Validity and reliability</b>					
- <b>The questionna ire design</b>				C.2,	
- <b>Writing the Research Paper or Manuscript</b>  - <b>Protoc ol Writing</b>			B.3,	C.3,	D.1, D.2, D.3

- Critic technique for the literature review					
- Association and causation		A.6,		C.4,	
- Evidence - based approach in medical		A.5,			

<b>practice</b>					
<b>- Ethics of medical research</b>		A.7			
<b><u>Statistics</u></b>					
<b>Sampling</b>		A.8, A.9, A.11			D.4
<b>Introduction to Sample Size Calculation</b>		A.10		C.10	D.4
<b>Data presentation</b>		A.13, A.14	B.6	C.9	D.4
<b>Tests of significance</b>		A.15, A.16	B.5	C.11	D.4
<b>Introduction to SPSS</b>		A.12	B.6	C.6, C.7, C.8	D.5, D.6
<b>Proportion test</b>		A.11	B.7, B.8		D.5, D.6
<b>Chi-square test</b>		A.11	B.7, B.8		D.5, D.6
<b>Student T test, Paired T test</b>		A.11	B.7, B.8		D.5, D.6
<b>ANOVA test</b>		A.11	B.7, B.8		D.5, D.6
<b>Correlation (simple and multiple)</b>		A.11	B.7, B.8		D.5, D.6
<b>Regression</b>		A.17	B.7, B.8		D.5, D.6
<b>Screening</b>		A.18, A.19	B.7, B.8	C.12	D.4

## 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
<b>Lecture</b>	A.1, A.2, A.3, A.4, A.5, A.6, A.7 , A.8,A9,A10,A11,A12,A13 A.14, A.15, A.16,A17, A.18	B.1, B.2, B.3, B.4, B5,B.6, B.7, B.8		
<b>Practical</b>			C1, C.3, C4, C.5, C.6, C.7, C.8. C.9, C.10, C11,C.12	
<b>Assignment</b>	A.11, A.13, A.18	B.7, B.8	C.2, C.6, C.8, C.9, C.10, C.12	D.1, D.2., D.4, D.5, D.6

### 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 paper based exam	A.3, A.4, A.5, A.6, A.7, A.8, A.9, A.14, A.15, A16, A18	B.3, B.5,		
Practical exam (Statistical exam)			C.1, C.2, C.5, C.6, C.7,C.8, C.9, C.10, C.11, C.12	
Oral exam	A.10, A11, A.12, A13, A.15, A.16, A.17, A18	B.1, B.2, B.6, B.7, B.8		D.1, D.2, D.5, D.6

○ **Course Coordinators:**

➤ **Coordinators: Lecturers: Dr / Chrestina Monir, Dr Shaimma Mahmoud**

**Assistant Coordinator: Assis .lecturer Shaza Fadel**

**Head of Department:**

**Professor Dr. Nashwa Nabil Kamal**

**Date of program specifications 1<sup>st</sup> approval by department council: 13 /5/2013.**

**Date of last update & approval by department council: 6 / 3 / 2023**

## Test blueprint for Research methodology course

for 1<sup>st</sup> part MD vascular Surgery- Code:VS 100

Topic	Hour	% of topic	Total No. of items	Written exam (100 marks)		Marks	Modified marks
				Knowledge	Intellectual		
<b>Research</b>							
<u><b>Introduction :</b></u> - Introduction to research. - Terminology and Rationale - Originality	3	10%	5	4	1	7	5
- Study design	4	13.3 %	8	3	5	17	17
- Sources of Errors in Medical Research - Bias and confounding and its Control.	3	10%	4	2	2	13	10
- Validity and reliability	2	6.67 %	3	2	1	7	5

- The questionnaire design	2	6.67 %	3	1	2	5	5
- Writing the Research Paper or Manuscript - Protocol Writing	2	6.67 %	4	1	3	13	10
- Critic technique for the literature review	2	6.67 %	2	1	1	7	5
- Association and causation	1	3.33 %	3	2	1	7	8
- Evidence - based approach in medical	2	6.67 %	1	1		3	5

practice							
- Ethics of medical research	2	6.67 %	2	2		3	6
<b>Statistics</b>							
Sampling	1	3.33 %	2	1	1	4	4
Introduction to Sample Size Calculation	1	3.33 %	1	1		2	2
Data presentation	1	3.33 %	3	2	1	5	4
Tests of significance	2	6.67 %	2	1	1	8	8
Introduction to SPSS	1	3.33 %	1	1		3	3
Screening	1	3.33 %	2	1	1	3	3
<b>Total</b>	<b>30</b>	<b>100 %</b>					<b>100</b>



## **Course (3)**

### **Surgical Anatomy**

#### **Course Specifications of surgical anatomy of MD degree in vascular surgery (Code: VS100)**

**University:** Minia

**Faculty:** Medicine

**Department:** Surgery

1. Program on which the course is given: MD degree in vascular surgery.
2. Department offering the program: department of Surgery
3. Department offering the course: Surgical Anatomy
4. Academic year / Level: 1st part
5. Last approval date: 5/3/2023.
6. Head of department: Prof. Dr. Amr Hamdy
7. Head of Unit of vascular surgery: Prof. osman aboelceba
8. Coordinator: Prof. osman aboelceba

#### **A- Basic Information**

Title: Course Specifications of surgical anatomy in MD degree vascular surgery

- Lectures :40 hours: (2 hours/week\*20 week)
- Practical: 20 hours: (1 hours/week\*20 week)
- Total: 60 hours

## **B- Professional Information**

### **1 - Overall Aims of Course**

By the end of the course the student should be able to have the professional knowledge about the surgical anatomy relevant to vascular surgery

### **2 - Intended Learning Outcomes of Course (ILOs):**

#### **a. General and Transferable skills:**

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

a.1 Describe the basics and recent advances in the normal structure and function of the human body on the macro levels.

a.2 Identify the recent advances in the normal growth and development of the human body.

a.3 List the recent advances in the abnormal structure, function, growth and development of human body.

#### **b. Intellectual skills:**

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

b.1 Integrate the knowledge of surgical anatomy with clinical examination and diagnosis.

b.2 Link between knowledge of surgical anatomy with for clinical and practical problem solving.

#### **c. Professional and practical skills:**

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

c.1 Apply the anatomical facts with clinical and surgical practice.

c.2 Train junior staff through continuous medical education programs.

#### **d. General and transferrable skills:**

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

d.1 Use of different sources for information and knowledge.

### **3- Contents**

Topics	Hours	Lectures	Clinical/Practical
Anatomy of the vascular system of the upper limb	6	4	2

Embryology of the vascular system of the upper limb	9	6	3
Anatomy of the vascular system of the lower limb	9	6	3
Embryology of the vascular system of the lower limb	6	4	2
Anatomy of the vascular system of the abdomen and pelvis and retroperitoneal spaces	6	4	2
Embryology of the vascular system of the abdomen and pelvis and retroperitoneal spaces	6	4	2

Mediastinum			
Anatomy of the vascular system of the thorax, thoracic duct and diaphragm	6	4	2
Embryology of the vascular system of the thorax, thoracic duct and diaphragm	6	4	2
Anatomy and embryology of the vascular system of the neck and neck triangles	6	4	2
TOTAL	60	40	20

## 5- Student Assessment Methods

5.1- Assignments for the students to empower and assess the general and transferable skills

---

5.2 final written exam to assess Knowledge, understanding and intellectual skills.

5.3 final oral exam to assess understanding and intellectual skills.

5.4 final practical exam to assess practical skills.

## Assessment Schedule

Assessment 3... Periodic 3... week: 33-35....

Assessment 5 ... Assignment.... Week: 32-32.....

Assessment 0....periodic. 5.... Week ...32-53.....

Assessment 5 ...Final practical exam... week: 53

Assessment 0.... Final written exam.... Week ...53

Assessment 3.....Final oral exam..... week....53

### **Weighting of Assessments**

Final-written Examination 60 %

Oral Examination. 20 %

Practical Examination 20 %

Total 100%

**Formative assessment only:** simple research assignment, logbook, attendance

### **6- List of References**

6.1- Course Notes (paper and electronic)

.....Notes of the department and practical notebook.....

6.2-

- Essential Books (Text Books):

- Rutherford **Vascular Surgery**.
- Wesley Moore's textbook on vascular surgery.
- Jamieson** and **Ruckley**, Surgical management of vascular disease.

6.3- Recommended Books

- Gray's Anatomy.
- Gran't's atlas of anatomy
- [Vascular Pathology \(Hodder Arnold Publication\)](#) by W. E. Stehbens and J. T. Lie

**Course Coordinator/s:**

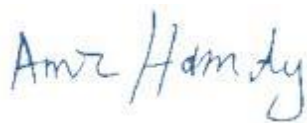
Prof.osman aboelceba

**Head of Unit of vascular Surgery;**

Prof.osman aboelceba

**Head of Department:**

Prof. Dr. Amr Hamdy



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

مسمى المقرر	جزء اول جراحة الاوعية الدموية
كود المقرر	CV100

جامعة/أكاديمية : .. المنيا.....

كلية / معهد..... :الطب...

قسم : الجراحة

#### 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 the vascular system of the upper limb		X	X	X	X
Embryology of the vascular system of the upper limb		X	X	X	
Anatomy of the vascular system of the lower limb		X	X	X	X

Embryology of the vascular system of the lower limb		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Anatomy of the vascular system of the abdomen and pelvis and retroperitoneal spaces		<b>X</b>	<b>X</b>	<b>X</b>	

Embryology of the vascular system of the abdomen and pelvis and retroperitoneal spaces		<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
Anatomy of the vascular system of the thorax, thoracic duct and diaphragm		<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
Embryology of the vascular system of the thorax, thoracic duct and diaphragm		<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
Anatomy and embryology of the vascular system of the neck and neck triangles		<b>x</b>	<b>x</b>	<b>x</b>	

**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. Profession al & 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
Training courses & workshops	X	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 Exam	X	X	X	
Assignment	X	X	X	X
Other/s(Specify)				

**Blueprint of surgical anatomy for 1<sup>st</sup> part Mdivascular surgery (Written exam)**

Topics	Hours	Knowledge %	Intellectual %	% of topic	Mark	Actual mark
Anatomy of the vascular system of the upper limb	4	90	10	10	10	10
Embryology of the vascular system of the upper limb	6	90	10	15	15	15
Anatomy of the vascular system of the lower limb	6	90	10	15	15	15
Embryology of the vascular system of the lower limb	4	90	10	10	10	10
Anatomy of the vascular system of the abdomen and pelvis and retroperitoneal spaces	4	90	10	10	10	10
Embryology of the vascular system of the abdomen and pelvis and retroperitoneal spaces	4	90	10	10	10	10
Anatomy of the vascular system of the thorax, thoracic duct and diaphragm	4	90	10	10	10	10
Embryology of the vascular system of the thorax, thoracic duct and diaphragm	4	90	10	10	10	10
Anatomy and embryology of the vascular system of the neck and neck triangles	4	90	10	10	10	10
TOTAL	40			100%		100

## **Course (4)**

### **Surgical Pathology**

#### **Course Specifications of surgical pathology of MD degree in vascular surgery (Code: CV100)**

**University:** Minia

**Faculty:** Medicine

**Department:** Surgery

1. Program on which the course is given: MD degree in vascular surgery.
2. Department offering the program: department of Surgery
3. Department offering the course: Surgical Pathology
4. Academic year / Level: 1st part
5. Last approval date: 5/3/2023.
6. Head of department: Prof. Dr. Amr Hamdy
7. Head of Unit of vascular surgery: Prof. osman aboelceba
8. Coordinator: Prof. osman aboelceba

#### **A- Basic Information**

Title: Course Specifications of surgical pathology in MD degree vascular surgery

- Lectures :40 hours: (2 hours/week\*20 week)
- Practical: 20 hours: (1 hours/week\*20 week)
- Total: 60 hours

#### **B- Professional Information**

##### **1 - Overall Aims of Course**

By the end of the course the student should be able to have the professional knowledge about the pathology of surgical diseases relevant to vascular surgery.

## 2 - Intended Learning Outcomes of Course (ILOs):

### a. General and Transferable skills:

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

a.1 Describe the basics and recent advances in the natural history of surgical vascular diseases.

a.2 Identify the recent advances in the pathogenesis of surgical vascular diseases.

### b. Intellectual skills:

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

b1. Identify vascular surgical problems and find solutions.

b2. Have the ability to innovate nontraditional solutions to vascular surgical problems.

### c. Professional and practical skills:

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

c1. Perform endoscopic and imaging evaluation of vascular surgical problems.

### d. General and transferrable skills:

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

d.1 Use of different sources for information and knowledge.

## 3- Contents

Topics	Total	Lectures	Practical/Clinical
Atherosclerosis	2	2	-
Intimal hyperplasia	4	2	2
Non-atherosclerotic arterial occlusive diseases	5	3	2
Peripheral and visceral aneurysms	4	2	2
Pathophysiology of acute and chronic ischemia	3	2	1

Pathophysiology of compartmental syndrome	4	2	2
Pathophysiology of cerebrovascular disease of extracranial origin	3	2	1
Pathophysiology of vasculitis	3	2	1
Pathophysiology of varicose veins	5	3	2
Pathophysiology of acute DVT	5	3	2
Pathophysiology of pulmonary embolism	2	2	-
Pathophysiology of CVI	5	3	2
Pathophysiology of thrombophilia	4	3	1
Pathophysiology of clotting disorders	4	3	1
Pathophysiology of vascular malformation	4	3	1
Pathophysiology of lymphedema	3	3	-
TOTAL	60	40	20

## 5- Student Assessment Methods

5.1- Assignments for the students to empower and assess the general and transferable skills

5.2 final written exam to assess Knowledge, understanding and intellectual skills.

5.3 final oral exam to assess understanding and intellectual skills.

5.4 final practical exam to assess practical skills.

**Assessment Schedule** Assessment 3... Periodic 3... week: 33-35....

Assessment 5 ... Assignment.... Week: 32-32.....

Assessment 0....periodic. 5.... Week ...32-53.....

Assessment 5 ...Final practical exam... week: 53

Assessment 0.... Final written exam.... Week ...53

Assessment 3.....Final oral exam..... week....53

### **Weighting of Assessments**

Final-written Examination 60 %

Oral Examination. 20 %

Practical Examination 20 %

---

Total 100%

**Formative assessment only:** simple research assignment, logbook, attendance

### **6- List of References**

6.1- Course Notes (paper and electronic)

6.2- Essential Books (Text Books)

- Rutherford **Vascular Surgery**.
- Wesley Moore's textbook on vascular surgery.

6.3- Recommended Books

- Jamieson and Ruckley**, Surgical management of vascular disease
- [Vascular Hemodynamics: Bioengineering and Clinical Perspectives](#) by Peter J. Yim
- [Vascular Biology Protocols \(Methods in Molecular Medicine\)](#) by Nair Sreejayan and Jun Ren.
- [Ultrasonography in Vascular Diseases: A Practical Approach to Clinical Problems](#) by Edward Bluth.

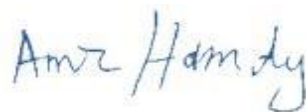
### **Course Coordinator/s:**

Dr. osman aboelceba

### **Head of Unit of vascular Surgery;**

Prof. osman aboelceba

**Head of Department:** Prof. Dr. Amr Hamdy





مسمى المقرر	جزء اول جراحة الاوعية الدموية
كود المقرر	CV100

جامعة/أكاديمية : ..المنيا.....

كلية / معهد.....:الطب...

قسم : الجراحة

#### 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
Atherosclerosis		X	X	X	X
Intimal hyperplasia		X	X	X	x
Non-atherosclerotic arterial occlusive diseases		X	X	X	X



Peripheral and visceral aneurysms		<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
Pathophysiolog y of acute and chronic ischemia		<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>

Pathophysiology of compartmental syndrome		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Pathophysiology of cerebrovascular disease of extracranial origin		<b>x</b>	<b>X</b>	<b>X</b>	<b>x</b>
Pathophysiology of vasculitis		<b>x</b>	<b>X</b>	<b>X</b>	<b>X</b>
Pathophysiology of varicose veins		<b>X</b>	<b>X</b>	<b>X</b>	<b>x</b>
Pathophysiology of acute DVT		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Pathophysiology of pulmonary embolism		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Pathophysiology of CVI		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Pathophysiology of thrombophilia		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Pathophysiology of clotting disorders		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Pathophysiology of vascular malformation		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>

Pathophysiology of lymphedema		<b>X</b>	<b>x</b>	<b>X</b>	<b>x</b>
----------------------------------	--	----------	----------	----------	----------

**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. Profession al & 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
Training courses & workshops	x	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 Exam	x	x	x	
Assignment	x	x	x	x
Other/s(Specify)				

**Blueprint of surgical pathology for 1<sup>st</sup> part Mdivascular surgery (Written exam)**

Topics	Hou rs	Knowled ge %	Intellect ual %	% of topi c	Ma rk	Actua l mark
Atherosclerosis	2	80	20	5	5	5
Intimal hyperplasia	2	80	20	5	5	5
Non-atherosclerotic arterial occlusive diseases	3	80	20	7.5	7.5	7.5
Peripheral and visceral aneurysms	2	80	20	5	5	5
Pathophysiology of acute and chronic ischemia	2	80	20	5	5	5
Pathophysiology of compartmental syndrome	2	80	20	5	5	5
Pathophysiology of cerebrovascular disease of extracranial origin	2	80	20	5	5	5
	2	80	20	5	5	5
Pathophysiology of varicose veins	3	80	20	7.5	7.5	7.5
	3	80	20	7.5	7.5	7.5
Pathophysiology of pulmonary embolism	2	80	20	5	5	5
Pathophysiology of CVI	3	80	20	7.5	7.5	7.5
Pathophysiology of thrombophilia	3	80	20			

				7. 5	7. 5	7. 5
Pathophysiology of clotting disorders	3	80	20	7. 5	7. 5	7. 5
Pathophysiology of vascular malformation	3	80	20	7. 5	7. 5	7. 5
Pathophysiology of lymphedema	3	80	20	7. 5	7. 5	7. 5
TOTAL	40			100 %		100

## **Course (5)**

### **Second part: vascular Surgery**

#### **Course Specifications of vascular Surgery for MD degree in vascular surgery (Code: VS100)**

**University:** Minia

**Faculty:** Medicine

**Department:** Surgery

1. Program on which the course is given: MD degree in vascular surgery.
2. Department offering the program: department of Surgery
3. Department offering the course: vascular Surgery
4. Academic year / Level: 1st part
5. Last approval date: 5/3/2023.
6. Head of department: Prof. Dr. Amr Hamdy
7. Head of Unit of vascular surgery: Prof. osman aboceba
8. Coordinator: Prof. osman aboceba

#### **A- Basic Information**

Title: Course Specifications of vascular surgery in MD degree vascular surgery

- Lectures :600 hours: (10 hours/week\*60 week)
- Practical: 360 hours: (6 hours/week\*60 week)
- Total: 960 hours



## **B- Professional Information**

### **1 - Overall Aims of Course**

- a. Deliver an advanced knowledge of vascular surgery and its subspecialties to recognize a wide range of vascular problems
- b. establish an advanced skill of the candidates to deal safely with the vascular surgery surgical disorders.

### **2 - Intended Learning Outcomes of Course (ILOs):**

#### **a. General and Transferable skills:**

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

- a.1 Identify recent advances in the techniques of different vascular surgical operations
- a.2 List the clinical picture and differential diagnosis of vascular surgical diseases and problems..
- a.3 Enumerate recent advances in the common diagnostic and laboratory techniques necessary to establish diagnosis
- a.4 Enumerate recent advances in the common diagnostic and laboratory techniques necessary to establish diagnosis of vascular surgical diseases and problems..
- a.5 Describe recent advances in the various therapeutic methods/alternatives used for vascular surgical diseases and problems.
- a.6 Identify the principles and fundamentals of ethics and legal aspects of professional practice in the field of vascular surgery.

#### **b. Intellectual skills:**

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

- b.1 Interpret data acquired through history taking to reach a provisional diagnosis for of vascular surgical problems.
- b.2 Select from different diagnostic alternatives the ones that help reaching a final diagnosis of vascular surgicl problems.
- b.3 Assess risk in professional practices in the field of of vascular surgery
- b.4 Plan to improve performance in the field of of vascular surgery
- b.5 Have the ability to innovate nontraditional solutions to of vascular surgical problems.

**c. Professional and practical skills:**

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

c.1 Master the basic and modern professional clinical and surgical skills in the area of vascular surgery

c.2 Train junior staff through continuous medical education programs.

**d. General and transferrable skills:**

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

d.1 Assess himself and identify his personal learning needs.

d.2 Work coherently and successfully as a part of a team and team's leadership.

d.3 Manage scientific meetings according to the available time.

**3- Contents**

Topic	Total	Lectures	Practical/Operative
Essentials of Clinical Evaluation and Selection of Patients for Vascular Interventions	32	20	12
Physiologic Assessment of Peripheral Arterial Occlusive Disease and Venous System	32	20	12
Principles of Arteriography, Venography and Lymphangiography	32	20	12
Atherosclerosis	32	20	12
Antithrombotic Therapy, Thrombolytic Agents and Their Actions	34	20	14
Nonoperative Management Of Patients With Vascular Diseases	34	20	14
Cardiac Complications: Screening and Prevention	34	20	14
Infection in Prosthetic Vascular Grafts	34	20	14
Lymphatic Complications of Vascular Surgery	32	20	12
arteritis	32	20	12
Perioperative Considerations: Coagulopathy and Hemorrhage	32	20	12
Neurovascular Conditions Involving The Upper Extremity	32	20	12
Arterial Aneurysms	32	20	12
The Management Of Splanchnic Vascular Lesions And Disorders			
Acute Limb Ischemia	32	20	12

Complications Of Vascular Surgery And Ischemia: Prevention And Management	32	20	12
Postoperative Graft Thrombosis: Prevention and Management	32	20	12
Extremity Amputation For Vascular Disease	32	20	12
Vascular Trauma	23	15	8
Open Vascular Surgery: Basic Considerations	23	15	8
Techniques for Thromboembolectomy of Native Arteries and Bypass Grafts	32	20	12
Endovascular-Surgery:Basic Considerations	32	20	12
Basic Techniques of Endovascular Aneurysm Repair	32	20	12
Management Of Chronic Ischemia Of The Lower Extremities	32	20	12
Management of Foot Ulcers in Diabetes Mellitus	23	15	8
Endovascular and Surgical Management of Extracranial Carotid	25	15	10
Endovascular and Surgical Management of Extracranial Carotid	23	15	8
Vascular Malformations	25	15	10
Arteriovenous Fistulas	23	15	8
Arteriovenous Hemodialysis Access	23	15	8
Management of Acute Deep Venous Thrombosis	23	15	8
Management of Varicose Veins	23	15	8
Chronic Occlusions of the Iliac Veins and the Inferior Vena Cava	23	15	8
The Management Of Lymphatic Disorders	23	15	8
TOTAL	960	600	360

<b>5-Teaching and Learning Methods</b>	<ol style="list-style-type: none"> <li>1. Lectures</li> <li>2. Clinical/practical rounds: <ul style="list-style-type: none"> <li>. Bedside tutorial</li> <li>. Case presentation</li> <li>. Group discussion</li> <li>. Problem solving</li> <li>. Operative room tutorial</li> </ul> </li> <li>3. Seminars</li> <li>4. Training courses</li> <li>5. workshops</li> <li>6. Conference attendance</li> <li>7. Journal club</li> </ol>
<b>6-Teaching and Learning Methods for students with limited Capacity</b>	Additional lectures, adjusting time and place of lectures according to their schedule and capacity
<b>7- Student Assessment</b>	
<b>A-Student Assessment Methods</b>	<b>1-Written exam</b> to assess the capability of the student for assimilation and application of the knowledge included in the course. The exam involves: <ul style="list-style-type: none"> <li>. Short essay</li> <li>. MCQs</li> </ul>

	<ul style="list-style-type: none"> <li>Problem solving</li> </ul> <p><b>2- Oral/Clinical exam</b> 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:</p> <ul style="list-style-type: none"> <li>Case sheet</li> <li>Case discussion</li> <li>OSCE</li> </ul>
<b>B-Assessment Schedule (Timing of Each Method of Assessment)</b>	<p><b>Assessment 1: one written exam</b> by the end of the course</p> <p><b>Assessment 2: Oral/Clinical exam</b>, after the written exam</p> <p><b>Formative only assessment:</b> logbook.</p>
<b>C-Weighting of Each Method of Assessment</b>	<p><b>Written examination:</b> 40%</p> <p><b>Oral/Clinical examination:</b> 60%</p> <p><b>Total:</b> 100 %</p>
<b>8- List of References</b>	
<b>A-Course Notes/handouts</b>	Course notes and Staff members printout of lectures and/or CD copies
<b>B-Essential Books</b>	<ul style="list-style-type: none"> <li>Rutherford <b>Vascular Surgery</b>.</li> <li>Wesley Moore's textbook on vascular surgery.</li> </ul> <p><b>Jamieson</b> and <b>Ruckley</b>, Surgical management of vascular disease</p>

<b>C- Recommended Text Books</b>	<ul style="list-style-type: none"> <li>• <a href="#">Vascular and Endovascular Surgery: A Comprehensive Review</a> by Wesley Moore</li> </ul> <a href="#">Comprehensive Vascular and Endovascular Surgery:</a> by John W. Hallett Jr.
----------------------------------	--

<b>D-Periodicals, websites</b>	<p>To be determined and updated during the coursework.</p> <ul style="list-style-type: none"> <li>• Journal of vascular surgery.</li> <li>• European journal of vascular surgery</li> </ul> <p>International angiology</p>
--------------------------------	--

**Course Coordinator/s:**

Prof. Dr. osman aboelceba

**Head of Unit of vascular Surgery;**

Prof. Dr. osman aboelceba

**Head of Department:**

Prof. Dr. Amr Hamdy



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

مسمى المقرر	جزء ثاني جراحة الاوعية الدموية
كود المقرر	VS100

جامعة/أكاديمية : ..المنيا.....

كلية / معهد..... :الطب...

قسم : الجراحة

#### 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
Essentials of Clinical Evaluation and Selection of Patients for Vascular Interventions		X	X	X	X
Physiologic Assessment of Peripheral Arterial Occlusive Disease and Venous System		X	X	X	X



Principles of Arteriography, Venography and Lymphangiography		X	X	X	X
Atherosclerosis		X	X	X	X
Antithrombotic Therapy, Thrombolytic Agents and Their Actions		X	X	X	X
Nonoperative Management Of Patients With Vascular Diseases		X	X	X	X

Cardiac Complications: Screening and Prevention		X	X	X	X
Infection in Prosthetic Vascular Grafts		X	X	X	X
Lymphatic Complications of Vascular Surgery		X	X	X	X
arteritis		X	X	X	X
Perioperative Considerations: Coagulopathy and Hemorrhage		X	X	X	X
Neurovascular Conditions Involving The Upper Extremity		X	X	X	X
Arterial Aneurysms		X	X	X	X
The Management Of Splanchnic Vascular Lesions And Disorders		X	X	X	X
Acute Limb Ischemia		X	X	X	X
Complications Of Vascular Surgery And Ischemia: Prevention And Management		X	X	X	X
Postoperative Graft Thrombosis:		X	X	X	X

Prevention and Management					
Extremity Amputation For Vascular Disease		X	X	X	X
Vascular Trauma		X	X	X	X

Open Vascular Surgery: Basic Considerations		X	X	X	X
Techniques for Thromboembolism of Native Arteries and Bypass Grafts		X	X	X	X
Endovascular-Surgery:Basic Considerations		X	X	X	X
Basic Techniques of Endovascular Aneurysm Repair		X	X	X	X
Management Of Chronic Ischemia Of The Lower Extremities		X	X	X	X
Management of Foot Ulcers in Diabetes Mellitus		X	X	X	X
Endovascular and Surgical Management of Extracranial Carotid		X	X	X	X
Endovascular and Surgical Management of Extracranial Carotid		X	X	X	X
Vascular Malformations		X	X	X	X

Arteriovenous Fistulas		X	X	X	X
Arteriovenous Hemodialysis Access		X	X	X	X
Management of Acute Deep Venous Thrombosis		X	X	X	X
Management of Varicose Veins		X	X	X	X
Chronic Occlusions of the Iliac Veins and the Inferior Vena Cava		X	X	X	X
The Management Of Lymphatic Disorders		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 & Understandin g	B. Intellectual Skills	C. Professio nal & Practical skills	D. General & Transfera ble Skills
	A	B	C	D
Lecture	x	x		
Practical	x	x	x	
Presentation/seminar	x	x	x	x
Journal club	x	x	x	x
Training courses & workshops	x	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 Exam	x	x	x	
Assignment	x	x	x	x
Other/s(Specify)				

**Blueprint of vascular Surgery for 2nd part MD vascular surgery (Written exam)**

**(300 Marks)**

Topics	Hou rs	Knowled ge %	Intellectu al %	% of topic	Mark	Actual mark
Essentials of Clinical Evaluation and Selection of Patients for Vascular Interventions	20	70	30	3.33	10	10
Physiologic Assessment of Peripheral Arterial Occlusive Disease and Venous System	20	70	30	3.33	10	10
Principles of Arteriography, Venography and Lymphangiography	20	70	30	3.33	10	10
Atherosclerosis	20	70	30	3.33	10	10
Antithrombotic Therapy, Thrombolytic Agents and Their Actions	20	70	30	3.33	10	10
Nonoperative Management Of Patients With Vascular Diseases	20	70	30	3.33	10	10
Cardiac Complications: Screening and Prevention	20	70	30	3.33	10	10
Infection in Prosthetic Vascular Grafts	20	70	30	3.33	10	10
Lymphatic Complications of Vascular Surgery	20	70	30	3.33	10	10
arteritis	20	70	30	3.33	10	10
Perioperative Considerations: Coagulopathy and Hemorrhage	20	70	30	3.33	10	10
Neurovascular Conditions Involving The Upper Extremity	20	70	30	3.33	10	10

Arterial Aneurysms	20	7 0	3 0	3.33	10	10
The Management Of Splanchnic Vascular Lesions And Disorders	20	7 0	3 0	3.33	10	10
Acute Limb Ischemia	20	7 0	3 0	3.33	10	10
Complications Of Vascular Surgery And Ischemia: Prevention And Management	20	7 0	3 0	3.33	10	10
Postoperative Graft Thrombosis: Prevention and Management	20	7 0	3 0	3.33	10	10
Extremity Amputation For Vascular Disease	15	7 5	2 5	2.50	7.5	7.5
Vascular Trauma	15	7 5	2 5	2.50	7.5	7.5
Open Vascular Surgery: Basic Considerations	20	7 0	3 0	3.33	10	10
Techniques for Thromboembolectomy of Native Arteries and Bypass Grafts	20	7 0	3 0	3.33	10	10

Endovascular-Surgery:Basic Considerations						
Basic Techniques of Endovascular Aneurysm Repair	20	7 0	3 0	3.3 3	1 0	1 0
Management Of Chronic Ischemia Of The Lower Extremities	20	7 0	3 0	3.3 3	1 0	1 0
Management of Foot Ulcers in Diabetes Mellitus	15	7 5	2 5	2.5 0	7. 5	7. 5
Endovascular and Surgical Management of Extracranial Carotid	15	7 5	2 5	2.5 0	7. 5	7. 5
Endovascular and Surgical Management of Extracranial Carotid	15	7 5	2 5	2.5 0	7. 5	7. 5
Vascular Malformations	15	7 5	2 5	2.5 0	7. 5	7. 5
Arteriovenous Fistulas	15	7 5	2 5	2.5 0	7. 5	7. 5
Arteriovenous Hemodialysis Access	15	7 5	2 5	2.5 0	7. 5	7. 5
Management of Acute Deep Venous Thrombosis	15	7 5	2 5	2.5 0	7. 5	7. 5
Management of Varicose Veins	15	7 5	2 5	2.5 0	7. 5	7. 5
Chronic Occlusions of the Iliac Veins and the Inferior Vena Cava	15	7 5	2 5	2.5 0	7. 5	7. 5
The Management Of Lymphatic Disorders	15	7 5	2 5	2.5 0	7. 5	7. 5
TOTAL	60 0			100 %		300



**Section IV**

**Course Reports**

**2023**

**Course report vascular surgery course (2<sup>nd</sup> part) for MD degree in  
vascular Surgery**

**October Exam 2023**

**University: Minia**

**Faculty: Medicine**

**Department: General Surgery**

**~~A-Basic Information~~**

**1- Course Title and Code: vascular surgery course (2<sup>nd</sup> part) for MD degree in  
vascular Surgery**

**2- Specialty: vascular Surgery**

**3- Level: Second part of MD degree**

**4- Number of units / Credit hours:**

**Lectures + Practical/clinical**

**600**

**360**

**5- Adopted system for selection & formation of ~~examiners'~~ committee:**

**Available**

**√**

**Not available**

6- System of external evaluation of the exam:

Available

Not available

✓

7- Number & Names of teaching staff members: \_13

Prof. amr hamdy

%

Prof. osman aboelceba

Dr. Michel samuel

%

Dr. Mustafa abdelgany

Dr. Moamen Elsanadeky Dr. Mustafa Mhamod

B- Professional Information

1- Statistical Information:%

- No. of students attended/joined the course

No.

1

100

- No. of students completed the course &

No.

1

100

attended the exam

%

%

Good

No:

%

%

- Results:

Passed:

No:

1

100

Failed:

No:

%

		<b>Very good:</b>	<b>No:</b>		
		<b>Pass:</b>	<b>No:</b>		

## 2- Course Teaching:

### - Course topics taught

Topic	Lecture No. of hours	Practical or clinical No. of hours
Essentials of Clinical Evaluation and Selection of Patients for Vascular Interventions	20	12
Physiologic Assessment of Peripheral Arterial Occlusive Disease and Venous System	20	12

Principles of Arteriography, Venography and Lymphangiography	20	12
Atherosclerosis	20	12
Antithrombotic Therapy, Thrombolytic Agents and Their Actions	20	14
Nonoperative Management Of Patients With Vascular Diseases	20	14
Cardiac Complications: Screening and Prevention	20	14
Infection in Prosthetic Vascular Grafts	20	14
Lymphatic Complications of Vascular Surgery	20	12
arteritis	20	12
Perioperative Considerations: Coagulopathy and Hemorrhage	20	12
Neurovascular Conditions Involving The Upper Extremity	20	12
Arterial Aneurysms	20	12
The Management Of Splanchnic Vascular Lesions And Disorders	20	12
Acute Limb Ischemia	20	12
Complications Of Vascular Surgery And Ischemia: Prevention And Management	20	12
Postoperative Graft Thrombosis: Prevention and Management	20	12
Extremity Amputation For Vascular Disease	15	8
Vascular Trauma	15	8
Open Vascular Surgery: Basic Considerations	20	12
Techniques for Thromboembolectomy of Native Arteries and Bypass Grafts	20	12
Endovascular-Surgery:Basic Considerations	20	12
Basic Techniques of Endovascular Aneurysm Repair	20	12
Management Of Chronic Ischemia Of The Lower Extremities	15	8
Management of Foot Ulcers in Diabetes Mellitus	15	10
Endovascular and Surgical Management of Extracranial Carotid	15	8
Endovascular and Surgical Management of Extracranial Carotid	15	10

Vascular Malformations	15	8
Acute Limb Ischemia	15	8
Complications Of Vascular Surgery And Ischemia: Prevention And Management	15	8
Postoperative Graft Thrombosis: Prevention and Management	15	8
Management of Varicose Veins	15	8
Chronic Occlusions of the Iliac Veins and the Inferior Vena Cava	15	8

- Total percentage of the essential course topics that actually covered: 100%

- Obligation/commitment of the teaching staff to the specified course content:

>85%

v

60-84 %

<60%

- The extent to which the exam covered the course topics:

>85%

v

60-84 %

<60%

- Teaching and Learning Methods:

Lectures	v
Practical/laboratory training	v
Clinical training	v
Grand rounds	
Case presentation & case study	
Training courses	
Seminars and workshops	v
Self-learning	v
Others (specify)	

3- Student Assessment:

Method of Assessment	Marks	%
Written examination		40
Oral examination		60
Practical/ Laboratory examination		
Clinical examination		
Assignments/ activities/logbook		

Other (Specify)		
Total		100%

Available

Available to  
some extent

#### 4- Facilities available for Teaching:

##### - Scientific references

v

Unavailable

Unavailable


##### - Assistant aids/tools:

Available

Available to  
some extent

v


##### - Other materials, supplies and requirements

Available

--

Available to  
some extent

v
---

Unavailable



##### 5- Administrative & regulatory Constraints:

No ☒ Yes

- If yes, Please specify:

##### 6 – Results of student feedback as a result of course evaluation:

- Attached the results of the questionnaire including the percentage of individual items

التدرب على المهارات العملية

اختصار المقرر

##### 7- External evaluator/s comments:

Attached the external evaluator report.

البرنامج مستوف البانات الاساسية و مطابق للمعيار الأكاديمي والقاسية و تحتوي على اهداف - واضحة و المخرجات توافق الاهداف التعلم

##### 8- Completed actions related to course development in the last year:

- Revision and update of course contents and references.
- Availability of online lectures

##### 9- Non-completed actions related to course development in the last year:

- Availability of lectures' handouts

##### 10- Action plan for the next academic year:

- Fields/areas of course development

Actions Required	Completion Date	Responsible Person
1-Improving the teaching tools: improved infrastructures: including teaching places; hall and laboratory, comfortable desks, security and safety, screens	By the end of 2023	All staff ادارة الكلية

2- Enhance Scientific Activities: The candidates should participate in the scientific activities of the department such as:	By the end of 2023	Staff of vascular Suregry Department
-3 Attending seminars (including recent topics and controversial issues)	By the end of 2023	Staff of vascular Suregry Department
4- Performing practical workshops	By the end of 2023	Staff of vascular Suregry Department

**Course Coordinator:** Prof. osman aboelceba

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

**Head ofUnit of vascular Surgery:** Prof. osman aboelceba

**Head of Department:** Prof. Dr. Amr Hamdy

Amr Hamdy

# **Section V**

## **Program Report**

نموذج رقم (51) 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	Medical doctorate Degree (MD) in Vascular surgery VS100
2-Speciality: التخصص	Vascular surgery
3-No of program's years: عدد السنوات الدراسية	3.5
4- No of courses عدد المقررات	5 courses include:  1. Medical research 2. Computer and statistics 3. Surgical Anatomy 4. Surgical Pathology 5. Vascular 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 ( <input checked="" type="checkbox"/> ) not available ( <input type="checkbox"/> )

## B- PROFESSIONAL INFORMATION

<b>7-Statistics</b> <b>إحصائيات</b>	
-No of Students joined the program عدد الطالب الممتحنين بالبرنامج	year 2022 - (1 <sup>st</sup> Part) - 5 students
- Success rate in the program (%) (%) معدل النجاح في البرنامج	..... %
-Ratio of students attending the program this year (in relation to those of last 3 years) اتجاه الالتحاق بالبرنامج ( منسوبة الى الأعداد الممتحنة بالبرنامج خالل آخر 3 سنوات)	Increasing (√ ) Constant ( ) Decreasing ( )
-Final Exam results نتائج الامتحان النهائي	Passed ... %
-Distribution of success grades (%) توزيع تقديرت النجاح (%)	Excellent ( ) Very good ( ) good ( ) Pass ( )
<b>8- Academic standards</b> <b>المعايير الأكاديمية</b>	

<p>- Academic reference standards (ARS): المعايير الأكاديمية المرجعية</p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• faculty Council decree No.7528, in its session No.191, dated: 15\3\2010</li> <li>•Then, vascular department has developed the ILOS) for Master (MSc) program in Neurosurgery</li> </ul>
---	--



<p>- Knowledge &amp; Understanding: المعمومات والمفاهيم</p>	<p><b>By the end of the study of Master program in Neurosurgery the candidate should be able to:</b></p> <ul style="list-style-type: none"> <li>a.1 Explain the essential facts and principles of relevant basic sciences including Pathology, Anatomy, Histology and Physiology, pharmacology and biochemistry related to Neurosurgery.</li> <li>a.2 Recognize essential facts of clinically supportive sciences including Neurosurgery.</li> <li>a.3 Identify etiology, pathogenesis, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to Neurosurgery.</li> <li>a.4 Identify the basic ethical and medicolegal principles that should be applied in practice and are relevant to the Neurosurgery.</li> <li>a.5 Identify the basics and standards of quality assurance to ensure good clinical care practice in the field of Neurosurgery.</li> <li>a.6 Identify the ethical and scientific principles of medical research in Neurosurgery.</li> <li>a.7 Explain the impact of common health problems in the field of Neurosurgery on the society and how good clinical practice improves these problems.</li> <li>a.8 Identify recent advances techniques and procedursin the practice of Neurosurgery</li> </ul>
<p>- Intellectual skills المهارات العقلية</p>	<p><b>By the end of the program the candidate should be able to:</b></p> <ul style="list-style-type: none"> <li>b.1 Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the Neurosurgery.</li> <li>b.2 Solve problems of common clinical situations related to Neurosurgery</li> </ul>

	<p>b.3 Design a research study or review on common clinical problems relevant to the field of Neurosurgery.</p> <p>b.4 Formulate management plans and alternative decisions in different situations in the field of the Neurosurgery.</p> <p>b.5 Assess risk in professional practices in the field of Neurosurgery.</p> <p>b.6 Plan for the development of performance in the field of Neurosurgery.</p> <p>b.7 Combine knowledge for professional problems' solving.</p> <p>b.8 Assess common ethical dilemma and its proper sollution.</p>
<p>-Professional &amp; practical/clinical skills: المهارات الاحترافية والسريرية</p>	<p><b>By the end of the program the candidate should be able to:</b></p> <p>c.1 Carry out patient management plans (clinical diagnosis, investigations, and modality of treatment) for common conditions related to Neurosurgery.</p> <p>c.2 Use information technology to support patient care decisions and patient education in common clinical situations related to Neurosurgery.</p> <p>c.3 Perform competently non invasive and invasive procedures considered essential for the Neurosurgery.</p> <p>c.4 Provide health care services aimed at preventing health problems related to Neurosurgery.</p> <p>c.5 Provide patient-focused care in common conditions related to Neurosurgery, while working with health care professionals, including those from other disciplines.</p> <p>c.6 Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.</p> <p>c.7 Orgaize a proper medical report.</p>



<p>-General &amp; transferable skills:</p> <p>المهارات العامة والمنقولة</p>	<p><b>By the end of the program the student should have the ability to:</b></p> <p>d.1 Perform practice-based improvement activities using a</p>
	<p>systematic methodology</p> <p>d.2 Perform data management including data entry and analysis using information technology to manage information, access online medical information; and support own education.</p> <p>d.3 Maintain therapeutic and ethically sound relationship with patients.</p> <p>d.4 Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.</p> <p>d.5 Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.</p> <p>d.6 Practice cost-effective health care and resource allocation that does not compromise quality of care.</p> <p>d.7 Assist patients in dealing with system complexities.</p> <p>d.8 Be aware of the importance of life-long self-learning and show a strong commitment to it.</p> <p>d.9 Organize material from different scientific sources including library, electronic and online resources.</p> <p>d.10 Dealing effectively with unethical behavior of other members of healthcare team.</p>
<p>- Students' support system (students with limited capabilities &amp; those with outstanding performance):</p> <p>طرق دعم الطالب (ذوي القدرات المحدودة والتميزين)</p>	<ul style="list-style-type: none"> <li>• Special sessions to explain any difficult part for students to understand</li> <li>• Different schedule according to their ability (putting time tables that not overlaps their teaching schedule)</li> <li>• Rewarding students who provide good seminars</li> </ul>
<p>-External reference standards for the program (Benchmark):</p>	<ul style="list-style-type: none"> <li>• Minia faculty of medicine adopted the standards provided by accreditation</li> </ul>

معايير القياس المرجعية لمبرنامج	council for graduate Medical Education" ( <a href="http://acgme.org">http: acgme.org</a> ). (Date and NO. of <u>faculty council</u> approval). <ul style="list-style-type: none"> <li>Comparison between ARS of Master program in Minia faculty of medicine &amp; External benchmarks.</li> </ul>
-Program handbook: دليل البرنامج	Available ( √ )    Not available (   )
-Program review process: نظام الم ارجعة الدورية لمبرنامج	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	<ul style="list-style-type: none"> <li>Cost and inavailability of Simulation-based education to allow training on complex procedures</li> <li>Surgical trainees on rotating shifts are often not able to attend scheduled learning opportunities such as lectures, and tutorials</li> <li>Lack of resources</li> </ul>

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 Complete 3.Practical Exams 4. Oral Exams 5.Seminars, presentations, assignments 6.log book
-Timetable/schedule: المواعيد	<b>First Part:</b> (≥6 months=1 semester): <ul style="list-style-type: none"> <li>At least six months after registration should pass before enrolling for the first part examination.</li> </ul>

- 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.

**Second Part:** (≥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.

**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 published from the Master

	<p>thesis and accepted at least one month before asking for the second part exam.</p> <ul style="list-style-type: none"> <li>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.</li> </ul>
-External evaluator comments: (if present) ملاحظات المراجع الخارجي (إن وجدت)	

### 1- Educational resources:

Ratio of teaching staff to student numbers نسبة أعضاء هيئة التدريس عمى راس العمل الى الطالب	Sufficient
- Suitability of staff members specialties as well as distribution of teaching loads for program's needs مدى مائتمة تخصصات أعضاء هيئة التدريس وتوزيع الأعباء عمييم طبقا لاحتياجات البرنامج	<p>Suitable ( ) Suitable to some extent ( v ) Non- Suitable ( ) (why?) ..... ..... .....</p>
-Library: المكتبة	<p>Suitable ( ) Suitable to some extent ( v ) Non- Suitable ( ) (why?) ..... ..... .....</p>
-Laboratories/clinical places: أماكن التدريب الكميينيكي/المعامل	<p>Suitable ( ) Suitable to some extent ( v ) Non- Suitable ( ) (why?) ..... ..... .....</p>
-Computers/computer labs: الحاسب آلي	<p>Suitable ( ) Suitable to some extent ( v ) Non- Suitable ( ) (why?) ..... ..... .....</p>

-Collaboration with other organizations for offering students training opportunities: مدى التعاون مع جيات الأعمال في توفير فرص التدريب لمطالب	Collaboration with department of vascular surgery at: Assuit university Ain shams university Alexandria university
-Other program requirements: أي متطلبات أخرى لبرنامج	TOEFL FLDP & ICTP courses and certificates.

## 2- Quality management & development system

### نظام إدارة الجودة والتطوير

- The follow up system for areas of Weakness: نظام المتابعة لجوانب القصور	Effective ( ) Effective to some extent ( v ) Not effective ( ) (Why?) ..... ..... ..... .
Implementation of faculty and university bylaws: إجراءات تطبيق لوائح وقوانين الكلية والجامعة	Suitable ( ) Suitable to some extent (v ) 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	

### 3- Program development suggestions:

مقترحات تطوير البرنامج

-Program structure (courses / hours):	more practical hours
ديكل البرنامج ( المقررات / الساعات )	including more subspecialties
-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



Actions Required	Completion Date	Responsible Person
According to instructions of postgraduate office	According to committees' schedule	<b>All staff members</b>
Setting up collaborations with specialized institutes which accommodate facilities	By 2024	
More seminars and work shops	By 2024	

❖ **Action Plan:**

**Program Coordinator:**

1. Prof. Osman Abuelsebaa

**Date of program specifications 1<sup>st</sup> approval by department council: / / Date of last update & approval by department council: 5/3/2023**

**Head of Department: Professor Dr.  
Amr Hamdy**

*Amr Hamdy*