Master (MSc) Degree Programme and Courses Specification for NeuroSurgery

(According to currently applied bylaws)

Department of

Surgery Faculty of

medicine Minia

University

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CONTENTS

Department of General surgery Degree: Master degree (MSc) of Neurosurgery (NS200)

University: Minia

Faculty: Medicine

Department: Neurosurgery- Neurosurgery unit

Last date of approval: 5/3 /2023

A. Basic Information:

1. **Programme title:** Master degree of Neurosurgery
1. **Final award:** Master degree (MSc) of Neurosurgery
2. **Programme type:** single double multiple
3. **Responsible department:** Department of General surgery, Neurosurgery unit
4. **Departments involved in the programme:** Anatomy, Histology, Pathology, Physiology, Neurology, General surgery
5. **Program code:** NS 200
6. **Programme duration:** 2 years
7. **Number of programme courses:** 8
8. **Head of Department:** Prof. Dr. Amr Hamdy
9. **Head of Neurosurgery unit : Prof. Dr. Medhat Mmtaz El-Sawy**
10. **Coordinator:** Dr. Mohamed kamel mohamed
11. **External evaluator:** Prof. Dr. Ahmed Ebrahim Elghariany
12. **Internal evaluator:** Ahmed Mohamed Moawad
13. **Programme management team:** Dr. Mohamed Kamel Mohamed
14. Last date of program specifications approval: march 2023

B. Professional information:

1. Programme aims:

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

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

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

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

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

2. Intended Learning Outcomes (ILOs):

(a) Knowledge and understanding:

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

a.1 Explain the essential facts and principles of relevant basic sciences including Pathology, Anatomy, Histology and Physiology, Pathology, and Neurosurgery topics related to Neurosurgery.

a.2 Recognize essential facts of clinically supportive sciences including Neurosurgery.

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

a.4 Identify the basic ethical and medicolegal principles that should be applied in practice and are relevant to the Neurosurgery.
a.5 Identify the basics and standards of quality assurance to ensure good clinical care practice in the field of Neurosurgery.
a.6 Identify the ethical and scientific principles of medical research in Neurosurgery.
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.
a.8 Identify recent advances techniques and procedures in the practice of Neurosurgery

(b) Intellectual skills

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

b.1 Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the Neurosurgery.
b.2 Solve problems of common clinical situations related to Neurosurgery using an investigatory and analytic thinking approach.
b.3 Design a research study or review on common clinical problems relevant to the field of Neurosurgery.
b.4 Formulate management plans and alternative decisions in different situations in the field of the Neurosurgery.
b.5 Assess risk in professional practices in the field of Neurosurgery.
b.6 Plan for the development of performance in the field of Neurosurgery.
b.7 Combine knowledge for professional problems' solving.
b.8 Assess common ethical dilemma and its proper sollution

*** Skills:**

(c) Professional and practical skills

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

c.1 Carry out patient management plans (clinical diagnosis, investigations, and modality of treatment) for common conditions related to Neurosurgery.
c.2 Use information technology to support patient care decisions and patient education in common clinical situations related to Neurosurgery.
c.3 Perform competently non invasive and invasive procedures considered essential for the Neurosurgery.
c.4 Provide health care services aimed at preventing health problems related to Neurosurgery.
c.5 Provide patient-focused care in common conditions related to Neurosurgery, while working with health care professionals, including those from other disciplines.
c.6 Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.
c.7 Orgaize a proper medical report

(d) General and transferable skills

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

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

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

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

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

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

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

d.7 Assist patients in dealing with system complexities.

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

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

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

3. Programme Academic Reference Standards:

3a - 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 Master (MSc) 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 neurosurgery unit – general surgery department has developed these standards and developed the intended learning outcomes (ILOs) for Master (MSc) program in Neurosurgery 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:	**ILOS of the** Master degree	**remarks**
NAQAAE General Academic Reference Standards "GARS" for MD Programs	of Neurosurgery **programme- faculty of medicine- Minia University**	
١.المعرفة والفهم:		
أ- النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العالقة	a.1, a.2, a.3.a.8	100%
ب- أساسيات ومنهجيات وأخلاقيات البحث العلمي وأدواته المختلفة	a.6	
ج- المبادئ الأخلاقية والقانونية للممارسة المهنية٤ في مجال التخصص	a.4	
د- مبادئ وأساسيات الجودة في الممارسة المهنية٤ في مجال التخصص	a.5	
ه- المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية٤ البيئة وصيانتها	a.7	
٢. المهارات الذهنية :		**100%**
أ. تحليل وتقييم المعلومات في مجال التخصص والقياس عليها والاستنباط منها	b.1, b.2, b.4	
ب. حل المشاكل المتخصص استنادا على المعطيات المتاحة	b.2, b.4, b.7, b.8	
ج. إجراء دراسات بحثية٤ تضيف إلى المعارف	b.3	
د. صياغة أوراق علمية	b.3	
ز. تقييم المخاطر في الممارسات المهنية	b.5	
س. التخطيط لتطوير ألداء في مجال التخصص	b.6	
و. اتخاذ القرارات المهنية في سياقات مهنية مختلفة	b.2, b.4	
ي. االبتكار/ اإلبداع / الحوار والنقاش المبني على البراهين واألدلة	b.7	
٣. مهارات المهنية:		**100%**
أ- إتقان المهارات المهنية ألساسية والحديثة في مجال التخصص	c.1, c.3	
ب.- كتابة وتقييم التقارير المهنية	c.6, c.7	
ج.- تقييم وتطوير الطرق واألدوات القائمة في مجال التخصص	c.4	

	c.2	د. استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية
	c.5	ه التخطيط لتطوير الممارسة المهنية وتنمية أداء اآلخرين.
		٤. المهارات العامة والمنتقلة :
	d.4, d.5	أ.- التواصل الفعال بأنواعه المختلفة
	d.1, d.2	ب.- استخدام تكنولوجيا المعلومات بما يخYدم تطYوير الممارسYة
100%		المهنية
	d.3, d.7	ج. تعليم اآلخرين وتقييم أداءهم
	d.8	د. التقييم الذاتي والتعلم المستمر
	d.1, d.9	ه. استخدام المصادر المختلفة للحصول على المعلومات والمعارف
	d.5, d.10	و. العمل في فريق وقيادة فرق العمل
	d.6	ي.. إدارة اللقاءات العلمية والقدرة علي إدارة الوقت

3c- Program External References: No external references (Benchmarks)

4. Programme structure:

Programme duration: (2 years).

	Hour/week		
Subject	**Lectures**	**Practical**	**Clinical**
First part			
Surgical anatomy	**2**	**1**	**-----**
Histology	**2**	**1**	**-----**
Surgical Pathology	**2**	**1**	
Physiology	**2**	**1**	**-----**
neurology	**2**	**2**	**-----**
General Surgery	**2**	**2**	**1**
Second Part:			
neurosurgery	**2**	**2**	**2**

5. Programme courses

Course Title	Total No. of hours	No. of hours /week			Program ILOs Covered
		Lect.	Practical	Tutorial	
FIRST PART (Level of course):					
Surgical Anatomy	46	24	12		a.1, a.2, a.3, b.1,
Histology	48	24	12		a.1, a.2, a.3, b.1,
Surgical Pathology:	48	24	12		a.1, a.2, a.3, b.1, b.2, c.1, c.2
Physiology	48	24	12		a.1, a.2, a.3, b.1, b.2, c.1, c.2
Neurology	48	24	24		a.1, a.2, a.3, b.1, b.2, c.1, c.2
General surgery	48	24	24		a4, b8, c7
Training programs and workshops, field visits, seminars& other	Continuous				a.1, a.2, a.3, b.1, b.2, c.1, c.2
SECOND PART (Level of course):					
Neurosurgery and its branches	90	48	48		a.2, a.3, a.4, a.5, a.6, a.7, a.8, b.1, b.2, b.3, b.4, b.5, b.6, b.7, b.8, c.1,c.2, c.3, c.4, c.5,c.6, c.7, d.1, d.2, d.3, d.4, d.5,
Training programs and workshops, field visits, seminars& other scientific activities	continuous				a.2, a.3, a.4, a.5, a.6, a.7, a.8, b.1, b.2, b.3, b.4, b.5, b.6, b.7, b.8, c.1,c.2, c.3, c.4, c.5,c.6, c.7, d.1, d.2, d.3, d.4, d.5, d.6, d.7, d.8, d.9,

6. Programme admission requirements:

1- **General requirements:**

A-Candidates should have either:

1. MBBCH degree from any Egyptian faculty of medicine or

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

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

2. Specific Requirements:

- Candidates graduated from Egyptian Universities should have at least

"Good Rank" in their final year /cumulative examination, and grade

"Good Rank" in general surgery Course too.

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

- Candidate should have computer skills

7- Regulations for progression and programme completion

Duration of program is (2years), starting from registration till the 2nd part exam; divided to:

- **First Part: (≥6 months):**

• Program-related basic sciences & clinical sciences
• At least six months after registration should pass before the student can ask for examination in the 1st part.
• Two sets of exams: 1st in April — 2nd in October.
• For the student to pass the first part exam, a score of at least 60% in each curriculum is needed.(with at least 40% of the written exam)
• Those who fail in one curriculum need to re-exam it only.

- **Thesis**:

• Could start after passing the 1st part from registration and should be completed, defended and accepted after passing 6 ms from documentation (protocol registration) and after passing the1st part examination and at least one month before allowing entering 2nd part
Accepting the thesis occurs after acceptance and\ or publishing one thesis-based paper in local or international journal and this is adequate to pass this part.

-**Second Part**: (18 months):

• Program related specialized science of neurosurgery Courses .After passing 36 ms residency in the University hospital in the department of neurosurgery.
• The student should pass the 1st part before asking for examination 2nd part not more than 4 times.
• Resident in other places: 12 months training in the department of neurosurgery
• Fulfillment of the requirements in each course as described in the template and registered in the log book is a prerequisite for candidates to be assessed and undertake part 1 and part 2 examinations; as following:

- ● Training courses ● Case presentation
- ●Conference attendance ● Seminars
- ●Thesis discussion attendance ● Clinical rounds
- ●Workshops ● surgeries performed and attended
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• Two sets of exams: 1st in April— 2nd in October.
• For the student to pass the second part exam, a score of at least 60% in each curriculum is needed. (With at least 40%of the written exam)

The duration of registered Master degree should not be more than 4 years till agreement of the Department council (after taking opinion of supervisors) and Faculty council.

8- 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 perforeamnce

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

9- Evaluation of programme intended learning outcomes:

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

10 **-Methods of student assessment:**

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

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Head of neurosurgery unit:

Prof. Medhat ElSawy

Head of the General surgery **department:**

Prof. Dr. Amr Hamdy

Amr Hamdy


Faculty of Medicine- Minia University

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مصفوفة توافق المعايير القومية القياسية العامة لبرامج الماجستير مع المعايير ألأكاديمية المعتمدة من كلية الطب – جامعة المنيا لدرجة الماجستير في جراحة المخ و الأعصاب

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

NAQAAE	**Faculty** **Master (MSC) Program**
2.المعايير القياسية العامة: **NAQAAE General Academic Reference Standards "GARS" for Master Programs**	**2. Faculty Academic Reference Standards (ARS) for Master Program**
1. مواصفات الخريج: خريج برنامج الماجستير في أي تخصص يجب أن يكون قادرا على:	1.1. Demonstrate competency and mastery of basics, methods and tools of scientific research in Neurosurgery
١,١. إتقان أساسيات ومنهجيات البحث العلمي.	1.2. Have continuous ability to add developments in Neurosurgery through research

٢,١. العمل المستمر علي الإضافة للمعارف في مجال التخصص.	1.3. Appraise and utilize scientific knowledge to continuously update and improve academic and clinical practice in the Neurosurgery
٣,١.تطبيق المنهج التحليلي والناقد للمعارف في مجال التخصص والمجالات ذات العلاقة.	1.4. Acquire excellent level of medical knowledge in Neurosurgery and be able to correlate it with relevant basic biomedical, clinical, behavioral sciences, clinical sciences, medical ethics and medical laws
٤,١.دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا ومطورا للعلاقات البينية بينها.	1.5. Demonstrate profound awareness by current health problems and recent theories in Neurosurgery
٥,١. إظهار وعيا عميقا بالمشاكل الجارية والنظريات الحديثة في مجال التخصص.	1.6. Identify and create solutions for problems in Neurosurgery
٦,١.تحديد المشكلات المهنية و إيجاد حلولا مبتكرة لحلها.	1.7. Acquire a wide range of skills from basic skills to professional skills in common areas of specialtyof Neurosurgery
٧,١.إتقان نطاقا واسعا من المهارات المهنية في مجال التخصص.	1.8. Develop and improve new methods and approaches in the professional scientific practice of Neurosurgery
٨,١.التوجه نحو تطوير طرق و أدوات و أساليب جديدة للمزاولة المهنية.	1.9. Use suitable technologies to improve the professional scientific practice in the Neurosurgery

١,٩.استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية	1.10. Demonstrate effective communication skills and leadership competencies in different professional situations.
١,١٠.التواصل بفاعلية و قيادة فريق عمل في سياقات مهنية مختلفة.	1.11. Master decision making capabilities in different situations in view of the available data
١,١١.اتخاذ القرار في ظل المعلومات المتاحة.	1.12. Effective management, development & improvement of available resources and have the competency to get new resources
١,١٢.توظيف الموارد المتاحة بكفاءة وتنميتها والعمل على إيجاد موارد جديدة.	1.13. Demonstrate in depth awareness of public health and health policy issues and have the ability to improve & maintain health care and carryout system-based improvement of it.
١,١٣.الوعي بدوره في تنمية المجتمع و الحفاظ على البيئة.	1.14. Show appropriate attitudes and professionalism that reflect adherence to credibility and principles of scientific practice
١,١٤.التصرف بما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة.	1.15. Demonstrate commitment for lifelong learning and maintenance of competence and ability for continuous medical education in subsequent stages in Neurosurgery as well as teaching others.
١,١٥.الالتزام بالتنمية الذاتية المستمرة ونقل علمه و خبراته للآخرين.	1.1. Demonstrate competency and mastery of basics, methods and tools of scientific research in Neurosurgery

2.1.المعرفة والفهم: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا علي الفهم والدراية بكل من:	**2.1. Knowledge & Understanding:** **Upon completion of the Master Program in……., the graduate should have sufficient knowledge and understanding of:**
٢,١,١. النظريات واألساسيات والحديث من المعارف في مجال التخصص والمجاالت ذات العالقة	2.1.1. Understand the scientific basis and modern knowledge in the field of specialization and related medical sciences
٢,١,٢. التأثير المتبادل بين الممارسة المهنية* وانعكاسها علي البيئة	2.1.2. The mutual influence of professional practice on work environment, working conditions, and job characteristics.
٢,١,٣. التطورات العلمية في مجال التخصص	2.1.3. Scientific developments in the field of specialization
٢,١,٤. المبادئ األلخالقية والقانونية للممارسة المهنية في	2.1.4. Recognize basics of medico-legal

مجال التخصص	aspects of practice, malpractice and avoid common medical errors
٢,١,٥. مبادئ وأساسيات الجودة في الممارسة المهنية* في مجال التخصص	2.1.5. Quality principles in the scholarly field
٢,١,٦. أساسيات وأخالقيات البحث العلمي	2.1.6. Basis of research methodology and medical ethics.
2.2.المهارات الذهنية**:** بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على**:**	**2.2. Intellectual Skills:** **Upon completion of the master program of……, the graduate should be able to:**
٢,٢,١.تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل	2.2.1. Use judgment skills for analytical and critical problem solving
٢,٢,٢. حل المشاكل المتخصصة مع عدم توافر بعض المعطيات	2.2.2. Capable of integrating knowledge and dealing with complex subjects to solve problems
٢,٢,٣الربط بين المعارف المختلفة لحل المشاكل المهنية	2.2.3. Be capable of integrating research results and/or results of history, physical and laboratory test findings to solve a research or a clinical problem.
٢,٢,٤. إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية	2.2.4. Effectively apply research methods and carrying out a medical research thesis
٢,٢,٥. تقييم المخاطر في الممارسات المهنية في مجال التخصص	2.2.5. Be aware of risk management principles, and patient safety.
٢,٢,٦. التخطيط لتطوير ألداء في مجال التخصص	2.2.6. Establish goals, commitments, and strategies for improved professional performance in the field of specialty
٢,٢,٧. اتخاذ القرارات المهنية في سياقات مهنية متنوعة.	2.2.7. Take professional situational decisions and logically support them.

3.2.المهارات المهنية**:** بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على**:**	**3.2. Professional Skills:** **Upon completion of the master program of……, the graduate must be able to:**

٣,٢,١. إتقان المهارات المهنية اﻷلساسية والحديثة في مجال التخصص.	3.2.1. Master the basic and some advanced professional skills in his scholarly field.
٣,٢,٢كتابة و تقييم التقارير المهني.	3.2.2. Write and evaluate medical or scientific reports
٢,٣,٣تقييم الطرق واﻷدوات القائمة في مجال التخصص	3.2.3. Assess and evaluate technical tools during research
4.2. المهارات العامة والمنتقلة **:** بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على**:**	**4.2. General and transferable skills** **Upon completion of the master program of……, the graduate should be able to:**
٤,٢,١. التواصل الفعال بأنواعه المختلفة	4.2.1. Communicate effectively using a written medical record, electronic medical record, or other digital technology.
٤,٢,٢. استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية	4.2.2. Use of information technology (computer to create, process, store, secure and exchange electronic data) in the field of medical practice.
٤,٢,٣. لتقييم الذاتي وتحديد* احتياجاته التعلمية الشخصية	4.2.3. Assess himself and identify personal learning needs
٤,٢,٤. استخدام المصادر المختلفة للحصول على المعلومات والمعارف	4.2.4. Use various sources for information (physical and digital sources).
٤,٣,٥. وضع قواعد ومؤشرات تقييم أداء اآلخرين	4.2.5. Setting indicators for evaluating the performance of others
٤,٢,٦. العمل في فريق، وقيادة فرق في سياقات مهنية مختلفة	4.2.6. Work in a team, and Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system
٤,٢,٧. إدارة الوقت بكفاءة	4.2.7. Manage time efficiently
٤,٢,٨.التعلم الذاتي والمستمر	4.2.8. Demonstrate skills of self-learning and lifelong learning needs of medical profession.

Annex (2): Comparison between National Academic Q Assurance & Accreditation (NAQAAE) General Academic Reference Standards (GARS), Faculty Academic Reference Standards (ARS) and Program of Master degree (MSc) in Neurosurgery

NAQAAE برامج الماجستير	**Faculty** **Master (MSC) Program**	**ILOs of Program of Master degree (MSc) in Neurosurgery**
٢.المعايير القياسية العامة: **NAQAAE General Academic Reference Standards "GARS" for Master Programs**	**2. Faculty Academic Reference Standards (ARS) for Master Program**	
٢,١. المعرفة والفهم: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا علي الفهم والدراية بكل من:	**2.1. Knowledge & Understanding:** **Upon completion of the Master Program in……., the graduate should have sufficient knowledge and understanding of:**	
٢,١,١. النظريات واألساسيات والحديث من المعارف في مجال التخصص والمجاالت ذات العالقة	2.1.1. Understand the scientific basis and modern knowledge in the field of specialization and	a.1 Explain the essential facts and principles of relevant basic sciences including

	related medical sciences	Pathology, Anatomy, Histology and Physiology, neurology , general surgery topics related to Neurosurgery. a.2 Recognize essential facts of clinically supportive sciences including Neurosurgery.

		a.3 Identify etiology, pathogenesis, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to Neurosurgery.
٢,١,٢. التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة	2.1.2. The mutual influence of professional practice on work environment, working conditions, and job characteristics.	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.
٢,١,٣. التطورات العلمية في مجال التخصص	2.1.3. Scientific developments in the field of specialization	a.8 Idetify recent advaces in the field of Neurosurgery
٢,١,٤. المبادئ ألخالقية والقانونية للممارسة المهنية* في مجال التخصص	2.1.4. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors	a.4 Identify the basic ethical and medicolegal principles that should be applied in practice and are relevant to the Neurosurgery
٢,١,٥ مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص	2.1.5. Quality principles in the scholarly field	a.5 Identify the basics and standards of quality assurance to ensure good clinical care practice in the field of Neurosurgery.
٢,١,٦. أساسيات وأخالقيات البحث العلمي	2.1.6. Basis of research methodology and medical ethics.	a.6 Identify the ethical and scientific principles of medical research in Neurosurgery.
٢,٢. المهارات الذهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	**2.2. Intellectual Skills:** **Upon completion of the master program of……, the graduate should be able to:**	

٢,٢,١تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل	2.2.1. Use judgment skills for analytical and critical problem solving	b.2 Solve problems of common clinical situations related to

		Neurosurgery using an investigatory and analytic thinking approach.
٢,٢,١ حل المشاكل المتخصصة مع عدم توافر بعض المعطيات	2.2.2. Capable of integrating knowledge and dealing with complex subjects to solve problems	b.4 Formulate management plans and alternative decisions in different situations in the field of the Neurosurgery
٢,٢,٣الربط بين المعارف المختلفة لحل المشاكل المهنية	2.2.3. Be capable of integrating research results and/or results of history, physical and laboratory test findings to solve a research or a clinical problem.	b.1 Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the General Surgery. b.7 Combine knowledge for professional problems' solving.
٢,٢,٤. إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية	2.2.4. Effectively apply research methods and carrying out a medical research thesis	b.3 Design a research study or review on common clinical problems relevant to the field of Neurosurgery
٢,٢,٥. تقييم المخاطر في الممارسات المهنية في مجال التخصص	2.2.5. Be aware of risk management principles, and patient safety.	b.5 Assess risk in professional practices in the field of General Surgery.
٢,٢,٦. التخطيط لتطوير ألداء في مجال التخصص	2.2.6. Establish goals, commitments, and strategies for improved	b.6 Plan for the development of performance in the field

	professional performance in the field of specialty	of Neurosurgery.
٢,٢,٧. اتخاذ القرارات المهنية	2.2.7. Take professional situational decisions and	b.4 Formulate management plans and

في سياقات مهنية متنوعة.	logically support them.	alternative decisions in different situations in the field of the Neurosurgery b.8 Assess common ethical dilemma and its proper sollution
٣,٢. المهارات المهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	**3.2. Professional Skills:** **Upon completion of the master program of……, the graduate must be able to:**	
٣,٢, إتقان المهارات المهنية ألاساسية والحديثة* في مجال التخصص.	3.2.1. Master the basic and some advanced professional skills in his scholarly field.	c.1 Carry out patient management plans (clinical diagnosis, investigations, and modality of treatment) for common conditions related to General Surgery. c.3 Perform competently non invasive and invasive procedures considered essential for the General Surgery. c.4 Provide health care services aimed at preventing health problems related to Neurosurgery. c.5 Provide patient-focused care in common

		conditions related to Neurosurgery, while working with health care professionals, including

		those from other disciplines.
٣,٢,٢كتابة و تقييم التقارير المهني.	3.2.2. Write and evaluate medical or scientific reports	c.6 Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets c.7 Orgaize a proper medical report
٢,٣,٣تقييم الطرق واألدوات القائمة في مجال التخصص	3.2.3. Assess and evaluate technical tools during research	c.2 Use information technology to support patient care decisions and patient education in common clinical situations related to Neurosurgery.
4.2. المهارات العامة والمنتقلة : بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	**4.2. General and transferable skills** **Upon completion of the master program of……, the graduate should be able to:**	
4.2.1.التواصل الفعال بأنواعه المختلفة	4.2.1. Communicate effectively using a written medical record, electronic medical record, or other digital technology.	d.3 Maintain therapeutic and ethically sound relationship with patients d.5 Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.

4.2.2.استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية	4.2.2. Use of information technology (coputer to create, process, store, secure and exchange electronic data) in the	d.2 Perform data management including data entry and analysis using information technology to manage

	field of medical practice.	information, access online medical information; and support own education. d.9 Organize material from different scientific sources including library, electronic and online resources.
4.2.3.لتقييم الذاتي وتحديد احتياجاته التعلمية الشخصية	4.2.3. Assess himself and identify personal learning needs	d.1 Perform practice-based improvement activities using a systematic methodology d.8 Be aware of the importance of life-long self-learning and show a strong commitment to it.
4.2.4.استخدام المصادر المختلفة للحصول على المعلومات والمعارف	4.2.4. Use various sources for information (physical and digital sources).	d.9 Organize material from different scientific sources including library, electronic and online resources.
4.3.5.وضع قواعد ومؤشرات تقييم أداء اآلخرين	4.2.5. Setting indicators for evaluating the performance of others	d.10 Dealing effectively with unethical behavior of other members of healthcare team.
4.2.6.العمل في فريق، وقيادة فرق في سياقات مهنية مختلفة	4.2.6. Work in a team, and Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system	d.4 Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business

		practices. d.7 Assist patients in dealing with system

		complexities.
4.2.7. إدارة الوقت بكفاءة	4.2.7. Manage time efficiently	d.6 Practice cost-effective health care and resource allocation that does not compromise quality of care.
4.2.8. التعلم الذاتي والمستمر	4.2.8. Demonstrate skills of self-learning and lifelong learning needs of medical profession.	d.8 Be aware of the importance of life-long self-learning and show a strong commitment to it.

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

Teaching and learning methods	The assessed ILOs
• **Lectures**	a1, a2, a3, a4, a5, a6, a7, b1, b2, b3, b4, b5, b6, b7.
• **Thesis**	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.
• **Practical sessions:** **Observation of different light microscopic slides** **1- Light microscopic slides preparation and examination**	c1, c2, c3, c4, c5, c6, c7, d2, d3, d6, d7, d8

2- Statistical analysis of different data.	
● **Self-training activities seminars, presentations & assignments.** ● **Training courses & workshops.** ● **Thesis discussion attendance.** ● **Conference attendance**	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: ● **Short essay** ● **MCQs** ● **Problem solving**	a1, a2, a3, a4, a5, a6, a7, b1, b2, b3, b4, b5, b6, b7.
2. Practical and clinical Exams: **3. Exams:** **a. Case sheet** **b. Case discussion** **c. OSCE** **d. Imaging slides operative**	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 **Faculty(s):**
MEDICINE
Department:
Neurosurgery
Program: Master degree (MSc) in Neurosurgery (NS200)

Annex V: Matrix of Coverage of Course ILOs By Contents

Courses: (List of courses in first and second parts)	**Program Intended Learning Outcomes (ILOs)**																															
	Knowledge & Understanding .A							**B. Intellectual Skills**								**C. Professional & Practical skills**							**D. General & Transferable Skills**									
	a. 1	**a. 2**	**a. 3**	**a. 4**	**a. 5**	**a. 6**	**a. 7**	**b. 1**	**b. 2**	**b. 3**	**b. 4**	**b. 5**	**b. 6**	**b. 7**	**b. 8**	**c. 1**	**c. 2**	**c. 3**	**c. 4**	**c. 5**	**c. 6**	**c. 7**	**d. 1**	**d. 2**	**d. 3**	**d. 4**	**d. 5**	**d. 6**	**d. 7**	**d. 8**	**d. 9**	**d.10**
Surgical Anatomy	x	x	x					x	x							x	x															
Histology	x	x	x					x	x							x	x															
Surgical Pathology:	x	x	x					x	x							x	x															
Physiology	x	x	x					x	x							x	x															
Neurology	x	x	x					x	x							x	x															
General surgery				x											x							x										

Neurosurgery	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Head of neurosurgery unit:

Prof. Medhat ElSawy

Head of the General surgery **department:** **Prof. Dr. Amr Hamdy**

Amr Hamdy

Course (1) Surgical Anatomy

Course Specifications of Anatomy and Embryology in Master degree in neuro-surgery

University: Minia

Faculty: Medicine

Department: Anatomy

1. Course Information		
• **Academic Year/level:** first part	• **Course Title:** Course Specifications of Anatomy and Embrylogy in Master degree in **neuro-surgery**	**Code NS200**
• **Number of teaching hours:** - **Lectures:** Total of 20 hours - **Practical/clinical**: Total of 6 hours		
2. Overall Aims of the course	*By the end of the course the student must be able to:* to have the have the professional knowledge anatomy and embryology of spine and nervous system.	
3. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***		
A- Knowledge and Understanding	A1. Mention the normal structure and function of nervous system on the macro levels.	

	A2. Discuss early embryo development & normal growth and development of the nervous system systems. A3. List the recent advances in the abnormal structure, function, growth and development of skull, spine and peripheral nerves. A4. Demonstrate the anatomical basis of surface anatomy and radiologic anatomy
B- Intellectual Skills	B1. Link between knowledge for Professional problems solving. B2. Conduct research study and / or write a scientific study on a research problem. B3. Diagnose diseases based on anatomical disruptions. B4. Establish goals to improve performance in the field of anatomy of neurosurgery
C- Professional and Practical Skills	C1. Master the basic and modern medical skills in the area of internal medicine. C2. Description of diseases and anomalies based on anatomical data.
D- General and transferable Skills	d1. Communicate effectively by all types of effective communication. d2. Use information technology to serve the development of professional practice. d3. Assess the candidate himself and identify personal learning needs. d4. Use different sources to obtain information and knowledge d5. Assess the performance of others.

4. Course Contents

Topic	Lecture Hours	Practical/Clinical hours/week	Total No. of hours hours/week
Anatomy of brain and spinal cord	4	1	3
Anatomy of CNS: brain, ventricular system and central blood supply.	4	1	3
Development of the nervous system.	4	1	3
Functional anatomy of meninges and subarachnoid space.	4	1	3

Functional anatomy of the spinal cord tracts and reflexes	4	1	3
Functional anatomy of cerebellum and basal nuclei.	4	1	3
Functional anatomy of brain areas, visual, auditory and somato-sensory pathways.	4	-	3
Surgical anatomy of skull, spine and back muscles.	4	-	3
Revision	4	-	4
Total	20	6	46

5. Teaching and Learning Methods	1 - Lectures. 2 - Practical lessons. 3- Assignments for the students to empower and assess the general and transferable skills 4-Group discussion
6. Teaching and Learning Methods for students with limited Capacity	**written exam: paper based exams** **1 paper for 1st part exam** Short assay: to assess Knowledge, understanding Problem solving: asses intellectual skills Multiple choice: assess Knowledge, understanding and intellectual skills Periodic quizzes: assess Knowledge, understanding and intellectual skills **Practical exams (**skill lab exams): **to assess practical skills as well as intellectual skills.** **Oral exam: to assess understanding, intellectual skills and transferrable**.
7. Student Assessment	
A. Student Assessment Methods	
B. Assessment Schedule (Timing of Each Method of Assessment)	Assessment 1…. Final written exam (paper based exam). Week : 22-24 Assessment 2…..Final oral exam Week: 22-24

C. Weighting of Each Method of Assessment	Final-term Final written exam (paper based exam) Examination: 20 Oral Examination: 25 _____
8. List of References: - **Standring,S, Ellis, H., Healy, J.C., Johnson, D., and Williams, J.C., 2016. Gray's anatomy. 50th edition.** - **Junqueira, L.C. and Carneiro, J., 2015. Basic histology. 10th edition.** - **Moore K.L., and Agur A.M.R., 2016. Essential clinical anatomy. 14th edition.**	
A. Course Notes/handouts	Lecture notes prepared by staff members in the department.
B. Essential Books	Gray's Anatomy.
C. Recommended Text Books	A colored Atlas of Human anatomy and Embryology.
D. Periodicals, websites	American J. of Anatomy Cochrane Library,Medline & Popline

Course Coordinator/s:

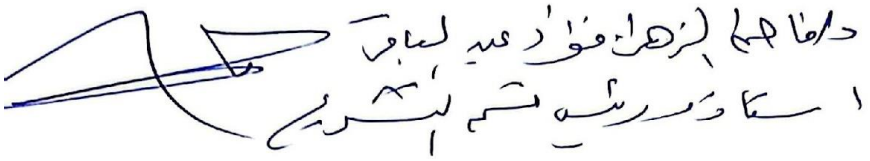
Prof. Dr. Nabil Abdelkader Hassan

Head of Department:

Prof. Dr. Fatma Alzahraa Fouad Abdel- Baky

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

5\ 3 \2023



مسمى المقرر	التشريح
كود المقرر	NS200

جامعة/أكاديمية : المنيا

كلية / معهد: الطب نموذج ١١

قسم: التشريح

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 CNS: spinal cord and brain stem	1	1,3,4	1,2	1	1,3
Anatomy of CNS: brain, ventricular system and central blood supply.	2	2,3	2	2	2,4
Development of the nervous system.	3	3,4	2	1,2	3,4
Functional anatomy of meninges and subarachnoid space.	4	1,4	1	1,2	1,3,4
Functional anatomy of the spinal cord tracts and reflexes	5	2,4	1	1	1,2,5
Functional anatomy of cerebellum and basal nuclei.	6	2,3	2	2	2,4
Functional anatomy of brain areas, visual, auditory and somato-sensory pathways.	7	1,4	1	1,2	4,5

Surgical anatomy of skull, spine and back muscles.	**8**	**2,4**	**1**	**1,2**	**1,2,5**

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

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

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

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	1,2,4	1,2		
Clinical exam				
Oral Exam	12,3,4			4,5
Assignment	2,4			1,2,3

Blueprint of neurosurgery MD" Examination Paper"
"50 Marks"

	Topic	Hours	Knowledge%	Intellectual%	% topic	No. of items per topic	Knowledge mark	Intellectual mark	Mark	Actual mark
1	Anatomy of CNS: spinal cord and brain stem	2	75%	25%	12.5%	4	4.6	1.65	6.25	6
2	Anatomy of CNS: brain, ventricular system and central blood supply.	2	67%	33%	12.5%	3	4.18	2.07	6.25	6
3	Development of the nervous system	2	67%	33%	12.5%	3	4.18	2.07	6.25	6

4	Functional anatomy of meninges and subarachnoid space.	2	67%	33%	12.5	3	4.18	2.07	6.25	6
5	Functional anatomy of the spinal cord tracts and reflexes	2	67%	25%	12.5%	3	4.18	2.07	6.25	6
6	Functional anatomy of cerebellum and basal nuclei.	2	67%	33%	12.5%	3	4.18	2.07	6.25	6
7	Functional anatomy of brain areas, visual, auditory and somato-sensory pathways.	2	67%	33%	12.5%	3	4.18	2.07	6.25	6
8	Surgical anatomy of skull, spine and back muscles.	2	67%	33%	12.5%	3	4.18	2.07	6.25	6
	Total	16			100%		33.86	16.14	50	50

نموذج

Course (2) Histology

رقم (١٢)

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

University: Minia

Faculty: Medicine

Department: **Histology and cell biology**

Course Information .١		
Academic Year/level: master's degree (1st part) in neurosurgery	**Course Title: Histology and Cell Biology**	**Code: NS200**
Number of teaching hours: 66 ***Lectures:*** *Total of 42 hours. 2h/week* **Practical:** Total of 24 hours 1h\week		
Overall Aims of the course .٢	*By the end of the course the student must be able to:* 1. Provide the postgraduate students with the medical Knowledge and skills essential for the practice of specialty and necessary to gain. 2. Provide master students with basic information about the structure and function of different tissues and organs affected in many diseases. 3. Maintenance of learning abilities necessary for continuous medical education. 4. Maintenance of research interest and competences .	
Intended learning outcomes of course (ILOs): .٣ ***Upon completion of the course, the student should be able to:***		
Knowledge and Understanding -A	A1. Define the histological structure of body tissues and organs. A2. List the structure and function of the different cells and organs. A3. List the basic abnormalities that might affect the tissue as a result of diseases.	

	A4. To identify the ability of different tissue to regenerate following the treatment of diseased condition.
Intellectual Skills -B	B1. Interpret histological changes in diseases compared to the normal histology
Professional and Practical Skills -C	C1. Teamwork, practicing and participation in scientific activities. C2. Master the basic and modern medical skills in the area of specialty. C3. Examine histological slides and identify the structure of different cells and organs.
General and transferable Skills -D	D1. Practice in groups, as a leader or as a colleague. D2. Use the advanced biomedical information to remain current with advances in knowledge and practice (self-learning). D3. Play role in the medical progress by having advanced medical information. D4. Be aware about the presentation skills through the attendance and participation in scientific activities.

Course Contents .٤

Topic	Lecture hours/week	Practical/Clinical hours/week	Total No. of hours hours/week
Introduction	1	-	1
Blood (part 1)	1	2	3
Blood (part 2)	1	2	3
Connective tissue (part 1	1	2	3
Connective tissue (part 2)	1	2	3
Connective tissue (part 3)	1	2	3
Cardiovascular system (part 1)	1	2	3
Cardiovascular system (part 2)	1	2	3
Cardiovascular system (part 3)	1	2	3
Lymphatic system (part 1)	1	2	3
Lymphatic system (part 2)	1	2	3
Lymphatic system (part 3)	1	2	3
Nervous tissue (part 1)	1	2	3
Nervous tissue (part 2)	1	2	3
Nervous tissue (part 3)	1	2	3
Nervous tissue (part 4)	1	2	3
Central nervous system (part 1)	**1**	**2**	**3**
Central nervous system (part 2)	**1**	**2**	**3**
Central nervous system (part 3)	**1**	**2**	**3**
Peripheral nervous system (part 1)	**1**	**2**	**3**
Peripheral nervous system (part 2)	**1**	**2**	**3**

Peripheral nervous system (part 3)	**1**	**2**	**3**
Revision	**1**		**1**
Revision	**1**	**-**	**1**
Total	**24**	**42**	**66**
Teaching and Learning Methods .٥	● Lectures & group discussions. ● Assignments and practical activities. ● Attending and participating in scientific conferences and workshops to acquire the general and transferable skills needed		
Teaching and Learning Methods for students with limited Capacity .٦			
Student Assessment .٧			
Student Assessment Methods .A	● Written exam to assess capability of students to assimilate and applicate knowledge included in the course. ● Oral exam to assess the student intellectual and communication abilities regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the percentage of achievement of the intended learning outcome of the course.		
Assessment Schedule (Timing of Each Method of Assessment) .B	**Assessment 1:** written exams by the end of the course. **Assessment 2:** Oral exam, after the written exam. **Formative only assessment:** simple research assignment, logbook, slide box.		
Weighting of Each Method of Assessment .C	**Written examination:** 20 **Oral examination**: 10 **Total**: 30		
List of References .٨			
Course Notes/handouts .A	Notes of department and practical notebook		
Essential Books .B	1. Basic histology, Junqueira et al. 2. Bloom and Fawcett: Concise Histology. 3. Fawcett., Cell biology and histology. Gartner et al. 4. Lippincott Illustrated review: integrated systems 5. Oxford Handbook of Medical sciences		
Recommended Textbooks .C	1. Wheater's Functional Histology A Text and Colour Atlas. 7th Edition - April 3, 2023. 2. Stevens & Lowe's Human Histology (Fourth Edition)		

	Book. 4th Edition. 2015.
Periodicals, websites .D	**Web Sites:** To be determined and update during the course work. 1. http://www.histology-world.com. 2. http://histo.life.illinois.edu/histo/atlas/slides.php **Periodicals:** 1. Journal of molecular histology 2. Egyptian J of Histology 3. Egyptian J of Anatomy 4. Acta Anatomica 5. International J of Experimental Research 6. Cell and Tissue Research

Course Coordinator/s:

-Assisstant prof. Soha Abel Kawy
- Assistant Lecturer: Rasha Mohamed

Head of Department:
Prof. Dr. **Seham Abd El-Raouf Abd El-Aleem**

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

نموذج رقم (١١أ)

مسمى المقرر	Neurosurgery
كود المقرر	NS200

جامعة/أكاديمية : .....المنيا.....
كلية / معهد: ...الطب.....
قسم: .....الهستولوجي.....

Matrix of Coverage of Course ILOs By Contents .A

Contents (List of course topics)	Week No.	Intended Learning Outcomes (ILOs)			
		A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
		A	B	C	D
Introduction	1	A1			
Blood (part 1)	2	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Blood (part 2)	3	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Connective tissue (part 1)	4	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4

Connective tissue (part 2)	**5**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Connective tissue (part 3)	**6**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Cardiovascular system (part 1)	**7**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Cardiovascular system (part 2)	**8**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Cardiovascular system (part 3)	**9**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Lymphatic system (part 1)	**10**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Lymphatic system (part 2)	**11**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Lymphatic system (part 3)	**12**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Nervous tissue (part 1)	**13**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Nervous tissue (part 2)	**14**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Nervous tissue (part 3)	**15**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**

Nervous tissue (part 4)	**16**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Central nervous system (part 1)	**17**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Central nervous system (part 2)	**18**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Central nervous system (part 3)	**19**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Peripheral nervous system (part 1)	**20**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Peripheral nervous system (part 2)	**21**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Peripheral nervous system (part 3)	**22**	**A1,A2,A3,A4**	**B1**	**C1,C2,C3**	**D1,D2,D3,D4**
Revision	**23**	**A1,A2,A3,A4**	**B1**		
Revision	**24**	**A1,A2,A3,A4**	**B1**		

.**B**

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

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

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

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

Blueprint of Histology and cell biology department for candidates of master degree in neurosurgery “first part” examination paper (20 marks)

	Topic	Hours	Knowledge %	Intellectual %	% of topic	N of items per topic	Knowledge		Intellectual		Marks
							N of items	mark	N of items	mark	
1	Introduction	1	100	-	4.16						0.5
2	Blood	2	80	20	8.3						1
3	Connective tissue	3	80	20	12.5						3
4	Cardiovascular system	3	80	20	12.5						3
5	Lymphatic system	3	80	20	12.5						3
6	Nervous tissue	4	80	20	16.6						3.5
7	Central nervous system	3	80	20	12.5						3
8	Peripheral nervous system	3	80	20	12.5						3
9	Revision	2	80	20	8.3						
	Total	24			100%						20

Course (3) Pathology

Course Specifications of Pathology

1st Part of Master Program of neurosurgery

2022-2023

University: Minia

Faculty: Medicine

Department responsible for offering the course: Pathology

Program on which the course is given: MSC of neurosurgery

9. Course Information		
• **Academic Year/level:** 1st part of MSC in neurosurgery	• **Course Title:** Pathology.	• **Code: NS 200**
• **Number of teaching hours:** - **Lectures:** Total of 46 hours; 2 hour/week - **Practical/clinical:** Total of 22 hrs., 2 hour/week		
10. Overall Aims of the course	*By the end of the course the student must be able to:* 1. Explain theories, basics & recent advances in the field of surgical pathology. 2. Appraise & interpret relevant basic information and correlate them with essential clinical data to reach a final diagnosis 3. Demonstrate competency on dealing with various biopsies and interpreting pathological reports and correlate such information with the relevant provided clinical data. 4. Learn the basic issues related to safety and maintain available resources.	

	5. Communicate efficiently with senior staff, colleagues in the same & other departments as well as lab technical staff, other health care professionals, students, and patients. 6. Use efficiently the information technology including data entry & analysis to enhance data management and to achieve improvement of the professional practice 7. Manage time efficiently and learn to priorities tasks 8. Show the skills of continuous & self-learning.
11. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***	
E- Knowledge and understanding	A1. Outline the basics of general pathology in areas of inflammation, bacterial infection, granuloma, repair, cell injury, circulatory disturbances, cellular adaptations and neoplasia. A2. Explain theories, basics & recent advances principally: natural history, etiology (especially those related to the environment), pathogenesis, pathological changes, structural and functional changes, clinical manifestations, fate and complications of common and important diseases in different body systems mainly GIT, lymphopoietic, hepatobiliary, endocrine and breast. A3. Outline the principles of immunohistochemistry and the recent advances in molecular techniques. A4. Identify the basic medico-legal principles that should be applied during the practice of pathology and autopsy. A5. Outline the standards of quality assurance to ensure good practice as a profession.
F- Intellectual Skills	B1. Interpret a pathology report and integrate the gross and microscopic features of surgical specimens with available clinical data to solve a problem to provide a list of differential diagnosis for further advanced investigations to reach the correct diagnosis. B2. Evaluate and control efficiently potential risks that may arise during the professional practice in various situations like handling and processing of specimens as well as during performing different essential laboratory techniques.

G- Professional and Practical Skills	C1. Demonstrate competency on dealing with different types of tissue samples regarding proper handling, preservation and processing and select the suitable preservatives with stickiness to quality & safety procedures. C2. Master writing pathology request by reporting all details regarding gross features of different surgical specimens and supply necessary clinical information. C3. Apply relevant issues related to safety & quality standards and ensure keeping available resources while dealing with biopsies and surgical specimens and all essential materials and equipment.
H- General and transferable Skills	D1. Demonstrate efficient communication & interpersonal skills in all its forms and in different situations that may involve senior staff, colleagues, students, lab technical staff, other health care professionals, and patients D.2. Use efficiently the information technology and select reliable sources of information to get essential information and updates regarding the different topics in surgical pathology. D.3. Develop skills of self-evaluation and identify personal learning needs to plan for self-development and continuous medical education D.4. Demonstrate the skills of effective time management.

12. Course Contents

Topic	Lecture 2hours/week	Practical/Clinical 2hours/week	Total No. of hours hours/week
GENERAL & Systemic PATHOLOGY			
1. Cell injury and cell death	4	2	6
2. Inflammation	4	2	6
3. Bacterial infection	2	-	2
4. Immunopathology	2	-	2

5. Granulomas	4	2	6
6. Repair	2	2	4
7. Circulatory disturbances	4	2	6
8. Disturbances of cell growth and adaptation	2	2	4
9. Neoplasia	4	2	6
10. Lymphopoietic system	4	2	6
11. Brain abscess	6	2	8
12. Brain tumors	4	2	6
13. Hydrocephalus	4	2	6
Total	46	22	68

9. Teaching and Learning Methods	5.1. Lectures: Both face to face & on-line ones. 5.2. Practical lessons: Gross pathology and interpretation of pathology reports 5.3. Self-directed learning (SDL) 5.4. Journal club, Case presentation, Seminars.
10. Teaching and Learning Methods for students with limited Capacity	Not applicable
11. **Student Assessment**	
D. Student Assessment Methods	**1. Written exam** to assess the acquired knowledge & understanding as well as intellectual skills and essential professional skills. 2. **Oral exam** to assess the student intellectual and communication skills regarding basic knowledge and understanding of the course topics, and to help the

	teaching staff to evaluate the % of achievement of the intended learning outcomes of the course.
E. Assessment Schedule (Timing of Each Method of Assessment)	● **Assessment 1: written exam** by the end of course. ● **Assessment 2: Oral exam,** after the written exam.
F. Weighting of Each Method of Assessment	**Type of Assessment** **Marks %** ● **Written** examination 15 (40 %) ● **Oral** examination. 22.5 (60 %) **Total** 37.5 (100%)
12. List of References	
E. Course Notes/handouts	1- General pathology course notes prepared by the department staff and 2- Lectures' Handouts & printed material of recorded ones.
F. Essential Books	1- Goldblum, John R., et al. Rosai and Ackerman's Sur Pathology E-Book. Elsevier Health Sciences (2017). 2- Kumar, V., Abbas, A. K., & Aster, J. C. Robbins b pathology e-book. Elsevier Health Sciences (2017).
G. Recommended Text Books	1- Liang Jing & David Bostwick. Essentials of anat pathology (2011). 2- Diana W Molavi. The practice of surgical patholog beginners guide to the diagnostic process (2008).
H. Periodicals, websites	To be determined and updated during the course 1-American Journal of pathology 2-The Journal of pathology 3-Diagnostic Histopathology

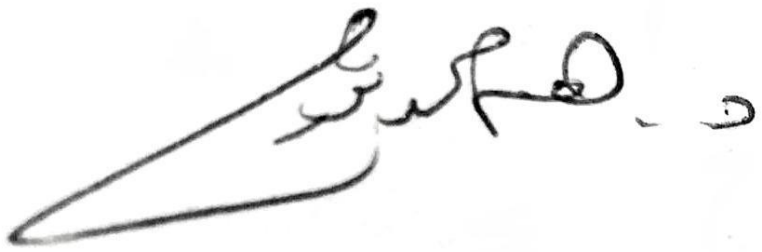
	4-Cancer 5-www.pubmed.com 6-www.pathmax.com

Course Coordinator/s:

- Assistant Prof. Dr. Manal Ismail Abd-Elghany

Head of Department:

Prof. Dr. Heba Mohamed Tawfik.



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

(نموذج رقم (١١أ

مسمى المقرر	Pathology
كود البرنامج	NS 200

جامعة/أكاديمية : جامعة.المنيا.....
كلية / معهد :كلية الطب.....
برنامج: ماجستير جراحة المخ و الاعصاب
قسم: الباثولوجي.....

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

Contents	Intended Learning Outcomes (ILOs)			
	A. Knowledge & understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
I. GENERAL PATHOLOGY TOPICS				
1. Introduction & Inflammation	A1,5	B1,2	C3	D1
2. Cell injury and cell death	A1,5	B1,2	C3	D1
3. Inflammation	A1,5	B1,2	C3	D1
4. Bacterial infection	A1,5	B1,2	C3	D1
5. Immunopathology	A1,5	B1,2	C3	D1
Granulomas	A1,5	B1,2	C3	D1
6. Repair				

	A1,5	**B1,2**	**C3**	**D1**
7. Circulatory disturbances	**A1,5**	**B1,2**	**C3**	**D1**
8. Disturbances of cell growth and adaptation	**A1,5**	**B1,2**	**C3**	**D1**
9. Neoplasia	**A1,5**	**B1,2**	**C3**	**D1**
iI. SYSTEMIC PATHOLOGY TOPICS				
10. Brain Abscess	A2:5	B1,2	C3	D1
11. Brain&spine tumors	A2:5	B1,2	C3	D1
12. Hydrocephalus	A2:5	B1,2	C3	D1
13. Intracranial hematoma	A2:5	B1,2	C3	D1

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

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
Lecture	A1:A5	B1,B2		
Practical	A3, A4, A5	B1, B2	C1:C3	
Presentation/seminar	A1: A5	B1,B2		D1:D4
Journal club	A1: A5	B1, B2		D1:D4

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

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
Written exam	A1:A5	B,B2		
Oral Exam	A1:A5	B1,B2	C1:C3	C1:D4
Log book	A1:A5	B1,B2	C1:C3	D1:D4

Test Blueprint for Pathology course, MSC of neurosurgery

Topic	No. of lectures' contact hours	% of topic	Final exam Marks	Modified marks
1. Cell injury and cell death	4	8.69	1.3	1
2. Inflammation	4	8.69	1.3	1.5
3. Bacterial infection	2	4.3	0.6	0.5
4. Immunopathology	2	4.3	0.6	0.5
5. Granulomas	4	8.69	1.3	1
6. Repair	2	4.3	1.3	0.5
7. Circulatory disturbances	4	8.69	1.3	1.5
8. Disturbances of cell growth and adaptation	2	4.3	0.6	0.5
9. Neoplasia	4	8.96	0.6	1
10. Lymphopoietic system	4	8.69	1.3	1.5
11. Brain abscess	6	13	1.95	2
12. Brain tumors	4	8.69	1.3	1.5
13. hydrocephalus	4	8.69	1.3	1.5
Total	46	100%	15	15

جامعة: المنيا كلية
: الطب البشري قسم:
الفسيولوجيا الطبية
العام الدراسي: ٢٠٢٢-٢٠٢٣

Course (4) Physiology

Medical Physiology Course Specifications

For 1st Part Master (MSc) Degree in NEUROSURGERY (2022-2023)

University: Minia

Faculty: Medicine

Faculty offering the program: Faculty of Medicine.
Department offering the course: Medical Physiology Department.
Program(s), on which the course in given: MSc Degree in **NEUROSURGERY. Major or minor element of program(s):** Medical Physiology.
Academic year/level: 1st part **MSc** degree in **NEUROSURGERY. Date of last update & approval: 6/3/2023**

Basic Information

Title: Physiology course specifications for 1st part MSC degree of **NEUROSURGERY**
Code: NS200 **Credit Hours:** Not applicable
Lectures: 2 hours / week
Tutorial/Practical: Not applicable

Professional information

1) OVERALL AIM OF COURSE:

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

INTENDED LEARNING OUTCOMES OF COURSE (ILOS)

A. <u>Knowledge and Understanding:</u>

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

A1. Describe the Physiology of Blood;

1.1. General constituents of blood & their functions.

1.2. Clinical conditions resulting from abnormalities of blood components.

A2. Discuss the Physiology of Cardiovascular System (CVS);

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

A3. Recognize the Physiology of Respiratory System;

3.1. Control of Respiration; Hypoxia & Cyanosis.

A4. Discuss the Physiology of Autonomic Nervous System (ANS);

4.1. Distribution; function and common disorders of ANS.
4.2. Chemical transmission in ANS.

5. Recognize the Physiological basis of Metabolism;

5.1. Body temperature regulation & fever.

A6. Describe the Physiology of the Central Nervous System (CNS);

6.1. Membrane potentials, action potentials & synaptic transmission.
6.2. Physiology of Pain (definition, types, body reactions & control).
6.3. Types & functions of sensory areas, tracts & common disorders
6.4. Types & functions of motor areas, tracts & common disorders.
6.5. Stretch reflex, UMNL & LMNL.
6.6. Physiology of Cerebellum & Basal ganglia.
6.7. Neuroendocrinology including Hypothalamus & Pituitary gland.

B. Intellectual Skills:

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

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

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

C. Practical Skills:

Practical hours: -

D. General and Transferable Skills:

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

D1. Adopt the principles of lifelong learning.

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

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

Curriculum structure & contents:

Topic:	No. of Lectures	No. of Hours
1. Physiology of Blood: ● General constituents of blood & their functions. ● Clinical conditions resulting from abnormalities of blood components.	3	6
2. Physiology of Cardiovascular System (CVS): ● Arterial blood pressure (APB); Haemorrhage & Shock.	3	6
3. Physiology of Respiratory system: ● Control of Respiration; Hypoxia & Cyanosis.	2	4
4. Physiology of ANS: ● Distribution; function and common disorders of ANS. ● Chemical transmission in ANS.	3	6
5. Recognize the Physiological basis of Metabolism; ● Body temperature regulation & fever.	1	2
6. Physiology of the Nervous System (NS); ● Membrane potentials, action potentials & synaptic transmission. ● Physiology of Pain (definition, types, body reactions & control). ● Types & functions of sensory areas, tracts & common disorders ● Types & functions of motor areas, tracts & common disorders. ● Stretch reflex, UMNL & LMNL. ● Physiology of Cerebellum & Basal ganglia. ● Neuroendocrinology including Hypothalamus & Pituitary gland.	12	24
Total	**24**	**48**

TEACHING AND LEARNING METHODS:

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

TEACHING AND LEARNING METHODS FOR STUDENTS WITH LIMITED ACHIEVMENTS:

1. Additional lectures & modifying time schedule according to their abilities.

STUDENT ASSESSMENT METHODS:

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

Assessment Schedule:

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

Weighting of assessment:

- **Final written exam** **20** marks (66.7 %)
- **Final oral exam** **10** marks (33.3%)
- **Total** **30** marks (100%)

LIST OF REFERENCES:

1. Department books and notes.

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

2. Essential books (Text Books):

- Ganong review of medical physiology.
- Guyton text book of medical physiology.

3. Periodicals, Web sites… etc.

FACILITIES REQUIRED FOR TEACHING AND LEARNING:

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

Course Coordinator(s),

Prof. Dr. Walaa Hassan Nazmy Dr. Shymaa Mahmoud Kotb

Head of Medical Physiology Department,

Prof. Dr. Merhan Mamdouh Ragy

Date of last update & approval: 6/3/2023

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امعة:
المنيا كلية
: الطب
البشري
قسم:
الفسيولوج
يا الطبية

العام الدراسي: ٢٠٢٢-٢٠٢٣

Physiology course specifications for **1st Part MSc degree in NEUROSURGERY**	مسمى المقرر
NS200	كود المقرر

A. Matrix of Coverage of Course ILOs by Contents

Contents	**Intended Learning Outcomes ILOs**																		
	A. Knowledge & Understanding														**B. Intellectual skills**		**D. General & Transferable Skills**		
	A 1.1	**A 1.2**	**A 2.1**	**A 3.1**	**A 4.1**	**A 4.2**	**A 5.1**	**A 6.1**	**A 6.2**	**A 6.3**	**A 6.4**	**A 6.5**	**A 6.6**	**A 6.7**	**B 1**	**B 2**	**D 1**	**D 2**	**D 3**
1. Physiology of Blood	X	X													X	X	X	X	X
2. Cardiovascular System			X												X	X	X	X	X
3. Respiratory System				X											X	X	X	X	X
4. Autonomic Nervous System					X	X									X	X	X	X	X
5. Physiology of Metabolism							X								X	X	X	X	X

6. Central Nervous System (CNS)								X	X	X	X	X	X	X	X	X	X	X	X

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

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

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

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

Course Coordinator,

Dr. Shymaa Mahmoud Kotb

Head of Medical Physiology Department,

Prof. Dr. Walaa Hassan Nazmy

Prof. Dr. Merhan Mamdouh Ragy

Date of Last update & approval: 6/3/2023

العام الدراسي: ٢٠٢٢-٢٠٢٣

Physiology Blue print for **1st Part MSc degree in NEUROSURGERY**	مسمى المقرر
NS200	كود المقرر

Topic	No. of Hrs.	% of Topic	Written exam (100%)		ILOs	Marks	Modified marks
			Knowledge	Intellectual			
● **Physiology of Blood & CVS**	**12**	**25**	**75%**	**25%**	**A1&A2**	**5**	**5**
● **Respiratory System**	**4**	**8.3**	**75%**	**25%**	**A3**	**1.7**	**2**
● **ANS & Metabolism**	**8**	**16.7**	**75%**	**25%**	**A4&A5**	**3.3**	**3**
● **Central Nervous System (CNS)**	**24**	**50**	**75%**	**25%**	**A6**	**10**	**10**
Total	**48**	**100%**	**100%**			**20**	**20**

Course Coordinator,
Walaa Hassan Nazmy Dr. Shymaa Mahmoud Kotb

Head of Medical Physiology Department,
Prof. Dr. Merhan Mamdouh Ragy

Date of last update & approval: 6/3/2023

Course (5): Neurology

Course Specifications of Neurology
1st Part of MSC Program of Neurosurgery
2022/2023

University: Minia

Faculty: Medicine

Department: Neurology and psychiatry

1. Course Information

· **Academic Year/level:** **1st part of MSC** of Neurosurgery.	· **Course Title:** Neurology.	· **Code: NS200**

· **Number of teaching hours:**

- **Lectures:** Total of **48** hours; **2** hours/week
- **Practical/clinical:** Total of **28** hours; **2** hours/week

2. Overall Aims of the course	*By the end of the course the student must be able to:* 1.1. Competent neurosurgeon with standard knowledge and skills of neurology 2.1. Diagnose and treat neurology diseases including critical neurology illnesses 3.1. Graduate is expected to apply recent national and international guidelines in neurology 4.1. Practice with sound professional ethical attitude; to interact with community problems 5.1. To take personal responsibility for his/her own continued medical development 6.1. Understand basics of scientific medical research.

3. Intended learning outcomes of course (ILOs):

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

A- Knowledge and Understanding	By the end of the study of master program the candidate should be able to: A1. Describe the essential anatomy and histology of the CNS A2.Identify the basic mechanisms of nervous system physiology and biochemistry A3.Recognize the essential pathological changes of nervous system diseases A4.Describe various pharmacological therapeutic options in neurology A5. Describe various non-pharmacological therapeutic options in neurology A.6.Define main neurological diseases, their etiologies, pathologies, diagnosis and management
B- Intellectual Skills	By the end of program the candidate should be able to: B1. Recognize various neurology disorders B2.Identify the pathology and pathogenesis of main neurology disorders B3.Interpret a case study B4. Analyze critical neurology problems B5.Evaluate the clinical manifestations of main neurology problems B.6. Evaluate the differential diagnosis of main neurology problems B.7.Identify various radiological abnormalities of neurology disorders

C- Professional and Practical Skills	By the end of the program the candidate should be able to: C1.Tell history of neurology patients C2.Perform neurological examination C3.Perform mental state examination C4.Solve main neurology problems including critical neurology problems C5.Perform aspiration of CSF C6.Assess severity and stages of neurology disorders

D- General and transferable Skills	D1. Demonstrate effective communication skills in all its forms in various circumstances and contexts including students, colleagues, senior staff, technicians, patients and other health care workers D2. Use efficiently information technology (IT) including data entry & analysis D3. Demonstrate skills of teaching others and evaluating their performance. D4. Develop the skills of assessment of personal learning needs and planning for self-development and continuous medical education. D5. Use efficiently available information resources to get basic & recent knowledge. D6. Work efficiently as a team member as well as a team leader in various professional events & circumstances. D7. Demonstrate basic & essential competencies for management of scientific meetings and manage time efficiently.

4. Course Contents

Topic	Lecture hours	Practical/Clinical hours	Total No. of hours hours
1- Neuroanatomy and Physiology	4	-	4
2- Case taking	4	4	8
3- Blood supply of the brain	4	2	6
4- Hemiplegia and cerebrovascular stroke	3	3	6
5- Brain Tumors	4	-	4
6- Headache and migraine	6	3	9

7- Diseases of the Extrapyramidal System	4	-	4
8- Demyelinating Diseases	2	3	5
9- Intrcranial Infections	7	4	11
10-Bladder and rectum	4	-	4
11- Diseases of the Spinal Cord	4	3	7
12- Diseases of the Peripheral Nerves	3	3	6
13- Diseases of the Muscles	3	3	6
Total	48	28	76
5. Teaching and Learning Methods	5.1. Lectures. 5.2. Practical/ case study 5.3. Self-learning activities such as use of internet and multimedia 5.4. Tutorial & regular weekly seminars, case presentation, training courses & workshops		
6. Teaching and Learning Methods for students with limited Capacity	-		
7. Student Assessment			

A. Student Assessment Methods	1. Written exam to assess the capability of the candidate for assimilation and application of the knowledge included in the course. Oral and clinical exam to assess the student intellectual and communication abilities regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the % of achievement of the intended learning outcome of the course & practical skills
B. Assessment Schedule (Timing of Each Method of Assessment)	Assessment 1: Written exam at the end of course. Assessment 2: Oral and clinical exam.
C. Weighting of Each Method of Assessment	**Type of Assessment %** • **Written** examination (50 Marks) • **Oral** examination. (25 Marks) **Total** (75 Marks)
8. List of References	

A. Course Notes/handouts	1 –Neurology notes: prepared by staff members
B. Recommended Text Books	2- Merrit textbook of Neurology
C. Periodicals, websites	To be determined and update during the course work. 1-Neurology journal 2- www.pubmed.com

- **Program Coordinators:** Dr. Rasha Nady Saleh, Lecturer of Neurology, Faculty of medicine, Minia university

- **Head of Department**:

Prof Dr. Nermin Ali Hamdy
Professor of neurology, Faculty of medicine – Minia university
Date of last update & approval by department council: 6/4/2022.

العام الدراسي: ٢٠٢٢-٢٠٢٣

Neurologycourse specifications for **1st Part MSc degree in NEUROSURGERY**	مسمى المقرر
NS200	كود المقرر

A. Matrix of Coverage of Course ILOs by Contents

Contents	**Intended Learning Outcomes ILOs**																		
	A. Knowledge & Understanding														**B. Intellectual skills**		**D. General & Transferable Skills**		
	A 1.1	**A 1.2**	**A 2.1**	**A 3.1**	**A 4.1**	**A 4.2**	**A 5.1**	**A 6.1**	**A 6.2**	**A 6.3**	**A 6.4**	**A 6.5**	**A 6.6**	**A 6.7**	**B 1**	**B 2**	**D 1**	**D 2**	**D 3**
1- Neuroanatomy and Physiology	X	X													X	X	X	X	X
2- Case taking			X												X	X	X	X	X
3- Blood supply of the brain				X											X	X	X	X	X
4- Hemiplegia and cerebrovascular stroke					X	X									X	X	X	X	X
5- Brain Tumors							X								X	X	X	X	X
6- Headache and migraine								X	X	X	X	X	X	X	X	X	X	X	X
7- Diseases of the Extrapyramidal System						X										X			
8- Demyelinating Diseases						x	x				x				x	X	x		
9- Intrcranial Infections			x	X	x											x			
10-Bladder and rectum					x		x	x									x	x	x

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

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

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

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

Course Coordinator, **Head of Medical Physiology Department**

, . Shymaa Mahmoud Kotb, **Prof. Dr. Merhan Mamdouh Ragy** Prof. Dr. Walaa Hassan NazmyDr

Date of Last update & approval: 6/3/2023

Blueprint of Neurology and psychiatry department for candidates of master degree in neurosurgery "first part" (50 marks)

	Topic	Hours	Knowledge %	Intellectual %	% of topic	N of items per topic	Knowledge		Intellectual		Marks
							N of items	mark	N of items	mark	
1	Neuroanatomy and Physiology	4	80	20	8.3	3	2	3.32	1	.8	4.15
2	Case taking	4	50	50	8.3	4	2	2.07	2	2.07	4.15
3	Blood supply of the brain	4	80	20	8.3	3	2	3.32	1	2.07	4.15
4	Hemiplegia and cerebrovascular stroke	3	80	20	6.25	3	2	2.4	1	.7	3.12
5	Brain Tumors	4	80	20	8.3	3	2	3.32	1	2.07	4.15
6	Headache and migraine	6	80	20	12.5	3	2	5	1	1.25	6.25
7	Diseases of the Extrapyramidal System	4	80	20	8.3	3	2	3.32	1	2.07	4.15
8	Demyelinating Diseases	2	80	20	4.16	3	2	1.7	1	.38	2.08
9	Intracranial Infections	7	80	20	14.6	3	2	9.8	1	2.5	12.3
10	Bladder and rectum	4	80	20	8.3	3	2	3.32	1	2.07	4.15
11	Diseases of the Spinal Cord	4	80	20	8.3	3	2	3.32	1	2.07	4.15
12	Diseases of the Peripheral Nerves	3	80	20	6.25	3	2	2.4	1	.7	3.12
13	Diseases of the Muscles	3	80	20	6.25	3	2	2.4	1	.7	3.12
	Total	48			100	39		30		20	50

Course Specification of General Surgery in Master degree in neurosurgery

Course (6): General surgery

University…….Minia Faculty ……...Medicine

1. Program on which the course is given: Master degree in neurosurgery
2. Major or minor element of program: Minor
3. Department offering the program: Neurosurgery.
4. Department offering the course: General Surgery departement
5. Academic year / Level: first part
6. Date of specification approval:

A- Basic Information

Title: Course Specification of General Surgery in Master degree in neurosurgery

Lecture	**Tutorial:**	practical	Total
35	**25**	25	85

NS200
Lecture:

Tutorial: - Practical: hrs. Total:

B- Professional Information

1. Overall Aims of Course

By the end of the course of General Surgery, the candidate should be able to:

1- Deal with common surgical conditions on the basis of adequate history taking, physical examination interpretation of relevant supportive investigations and management.

2- Deal with acute surgical emergencies safely and effectively.

3- Identify the indications and logistics of referring patients to higher levels of experience or specialization.

4- Perceive and integrate progress in surgical technology.

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

By the end of the course, the student is expected to be able to:

a.1-Understand the natural history of neurological that are related
to the General Surgery practice.

a.2- Understand the various diagnostic and laboratory techniques necessary to establish diagnosis of various neurological problems that need surgical intervention.

a.3- understand the atlas score in polytrauma patients
a-4- understand the important emergent general surgery cases with relation to neurosurgery
a.5- understand the basics of blood trasfusion

b) Intellectual Skills:

By the end of the course, the student is expected to be able to:

b.1 Integrate data acquired through history taking to reach a provisional
diagnosis for various problems in general surgery that are related to neuro-Surgery.

b.2- Link between knowledge of General Surgery and neurosurgery for Professional problems' solving.

b-3- ability to manage polytrauama cases with ATLAs score

b-4 manage and communicate with different surgical specialties in E.R.

b-5, electrolyte imbalance and shock managment

c) Professional and Practical Skills:

By the end of the course, the student is expected to be able to:

c.1- Perform physical examination of patients for neurosurgical problems that
are related to General Surgery.
c-2 perform basic surgical skills in the E.R
c-3- deal with emergent cases in different surgical specialties
c-4 assist in neck surgeries and know its anatomy.

d) General and Transferable Skills
By the end of the course, the student is expected to be able to:

d.1- Use information technology of General Surgery to serve the development of professional practice
d2- diagnose basic and main general and vascular surgery cases that correlate with neurosurgery.
3. Contents:

topic	No. of hours	lectures
A) General: (24 hours)		
Antibiotics	**1**	**1**
Haemorrhage and Shock	**4**	**2**
Anuria	**1**	**1**
Blood transfusion	**2**	**1**
Fluid and electrolyte balance	**2**	**1**
Wound healing	**2**	**1**
Suture materials	**2**	**1**
Postoperative complications	**2**	**1**
Injuries of intra-abdominal structures	**2**	**1**
Polytraumatized patient.	**2**	**1**
DVT & pulmonary embolism	**2**	**1**
Thyroid and parathyroid gland	**2**	**1**
B) Special (8 hours)		
Flaps and grafts	**2**	**2**
Facial trauma and fractures	**2**	**2**
Acute and chronic limb ischeamia	**2**	**2**
Pneumothorax , heamothorax , chest trauma	**2**	**2**
total	**32**	**20**

The matrix of the ILOs of General Surgery course

topic	No. of hours	**Program ILOs Covered (By No.)**
A) General: (24 hours)		
Antibiotics	**1**	**-a1-a2-a3-a4-a6**
Haemorrhage and Shock	**4**	**-a1-a2-a3-a4-a6**
Anuria	**1**	**-a1-a2-a3-**
Blood transfusion	**2**	**-a6-b3-b10-c2-c3**
Fluid and electrolyte balance	**2**	**-a1-a2-a6-b3-b10**
Wound healing	**2**	**-a1-a2-a3-a4-a6-b3**
Suture materials	**2**	**b10-c2-c3-d4-d8**
Postoperative complications	**2**	**-a1-a2-a3-a4-a6-b3**
Injuries of intra-abdominal structures	**2**	**-a1-a2-a3-a4-a6-b3-b10-c2-c3-d4-d8**
Polytraumatized patient.	**2**	**-a1-a2-c3-d4-d8**
DVT & pulmonary embolism	**2**	**-a1-a2-a3-a4-a6-b3**
Thyroid and parathyroid gland	**2**	**-a1-a2-a3-a4-d4-d8**
B) Special (8 hours)		
Flaps and grafts	**2**	**-a1-a2-a3-a4-a6-b3-b10-c2-c3-d4-d8**
Facial trauma and fractures	**2**	**-a1-a2-a3-a4-a6-b3**
Acute and chronic limb ischeamia	**2**	**-a1-a2-a3-a4-a6**
Pneumothorax , heamothorax , chest trauma	**2**	**-a1-a2-c2-c3-d4-d8**
total	**32**	

1. CLINICAL (20 Hrs):

- History taking, conducting clinical examination, diagnosing & suggesting investigations in different surgical patients specially those with abdominal masses, ,

DVT discussing these cases with staff members in duty .

-Sharing in pre-operative preparation of surgical patients.

-Observing post-operative patients in the department of surgery & sharing in their management.

-Studying surgical instruments, jars, suture materials & x-rays.

2. SURGICAL (25 Hrs);

The candidates should share in surgical lists in the department of surgery as assistants & surgeons,
Be trained on performing surgical incisions, closing different wounds.

They should be able to identify the head and neck surgery .

They should assist in surgeries of goitre,

4– Teaching and Learning Methods:
4.1- Lectures
4.2- Clinical lessons
4.3- Assignment

5- Student Assessment Methods:
5.1- Research assignment: to assess general transferable skills, intellectual skills.
5.2- Written exams:
• Short essay: to assess knowledge.
• Problem solving: to assess general transferable skills, intellectual skills.
5.3- Clinical exams: to assess practical skills, intellectual skills.
5.4- OSCE: to assess practical skills, intellectual skills.
5.5- Oral Exams: to assess knowledge.
5.6- Structured oral exams: to assess knowledge.

6- Assessment Schedule:
Assessment 1: Final written exam week: 24-28
Assessment 2: Oral exam week: 24-28
Assessment 3: Clinical exam week: 24-28

Weighting of Assessments:
Written Examination 50 **%**
Clinical Examination 30 **%**
Oral Examination 20%
Other types of assessment 0 %
Total 100%

Formative only assessment: simple research assignment, attendance and absenteeism

6- List of References:

6.1- Course Notes

Lectures notes prepared by staff members in the department.

6.2- Essential Books (Text Books)

Principles of General Surgery

6.3- Recommended Books

Bailey & Love textbook of Surgery

6.4- Periodicals, Web Sites, … etc

International Journal of General Surgery

American Journal of General Surgery

7- Facilities Required for Teaching and Learning

- Lecture rooms
- Round rooms
- Accessibility to hospital wards, clinics and emergency department
- Audio-visual teaching equipments (computers, data show projector, video, etc.)
- Models and mannequins
- Video tapes and scientific pictures archives.

adiology collections and archives.
- Library for the department.

Course Coordinator: **Head of Department:**

DR/ Yasser Ali **Prof Dr / Amr Hamdy**

Date:

Amr Hamdy

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Date of last update & approval by department Council:

5/3 / 2023

مسمى المقرر	جزء اول ماجستير جراحة مخ و اعصاب
كود المقرر	NS 200

جامعة/أكاديمية.. : المنيا .
كلية/ معهد الطب.....
قسم: جراحة المخ و الاعصاب

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

A ntibiotics	**1**	+	+		
Haemorrhage and Shock	2	+	+	+	
Anuria	3	+	+	+	
Blood transfusion	4	+	+	+	+
Fluid and electrolyte balance	5	+	+	+	
Wound healing	6	+	+	+	
Suture materials	7	+	+	+	
7.Postoperative complicatio ns	8	+	+	+	+
Injuries of intra-abdominal structures	9	+	+	+	+
Polytraumatize d patient.	10-12	+	+	+	+
DVT & pulmonary embolism	**13**	+	+	+	

Thyroid and parathyroid gland	14	+	+	+	
Flaps and grafts	15-16	+	+	+	+
Facial trauma and fractures	17-18	+	+	+	+
Acute and chronic limb ischeamia	19-20	+	+	+	
Pneumothorax , heamothorax , chest trauma	21-22	+	+	+	

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

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

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

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

Test blueprint of general surgery for neurosurgery master degree

Topic	No. of lectures' contact hours	% of topic	Final exam Marks	Modified marks
1- Antibiotics	**1**	8.69	1.3	1
2- Haemorrhage and Shock	**4**	8.69	1.3	1.5
3- Anuria	**1**	4.3	0.6	0.5
4- Blood transfusion	**2**	4.3	0.6	0.5
5- Fluid and electrolyte balance	**2**	8.69	1.3	1
6- Wound healing	**2**	4.3	1.3	0.5
7- Suture materials	**2**	8.69	1.3	1.5
8- 7.Postoperative complications	**2**	4.3	0.6	0.5
9- Injuries of intra-abdominal structures	**2**	4.77	0.6	1
10- Polytraumatized patient.	**2**	8.69	1.3	1.5
11- DVT & pulmonary embolism	**2**	8.69	1.3	1
12- Thyroid and parathyroid gland	**2**	4.3	1.3	1.5
13- Flaps and grafts		4.3	0.6	0.5
a. Facial trauma and fractures	**2**	4.3	0.6	0.5
14- Acute and chronic limb ischeamia	**2**	8.69	1.3	1
15- Pneumothorax , heamothorax , chest trauma	**2**	4.3	1.3	0.5
Total	32	100%	15	15

Course (7): Medical Ethics

Specification of Medical Ethics
Master degree of General Surgery (2022-2023)

University: Minia

Faculty: Medicine

Program on which the course is given: Master degree of General Surgery **Major or minor element of program:** Medical ethics, ethics of medical research
Department offering the program: General Surgery Department
Department offering the course: Forensic Medicine & Clinical Toxicology Department
Academic year / Level: First part
Date of specification approval: Last date of approval: **7/3/2023**

A. Basic Information		
· **Academic Year/level:** Post graduate; 1st Part MSC, General Surgery	· **Course Title**: Course Specification of Medical Ethics (Master degree of General Surgery)	· **Code**:
· **Number of teaching hours:** - **Lectures:** Total of 36 hours; 2 hour/week		
B- Professional Information		
1. Overall Aims of the course	By the end of the course the student should be able to identify the value of studying and practicing medicine, the duties of doctors towards their patients, colleagues and community, the ethics in medical consultations among colleagues and also able to explain respect the patient's confidentiality and secrets, recognize the role of health care providers in the community and describe medical errors, negligence and legal issues, ethics of medical research especially on human beings and finally able to explain ethics and evidence based medicine	

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

D- General and transferable Skills	**D.1-** Identify how to respect his/herself and the profession. **D.2-** Develop adequate behavior and skill communications with community. **D.3-** Modify life and live like others sharing social and national affairs. **D.4-** Develop the capacity of helping people and share in upgrading their culture and education. **D.5-** Identify how to participate in the national and social affairs and responsibilities.

Course Contents -3

Total hours	**Practical**	**Lecture**	**TOPIC**
	hours	**Hours**	
2	-------	2	**Medical Responsibility and Duties of the physician**
2	-------	2	**Medicolegal aspect of cloning**
2	-------	2	**Defensive Medicine**
2	-------	2	**Diagnosis of death & Death Certificates**
2	-------	2	**Consent in medical field**
2	-------	2	**Medical malpractice**
2	-------	2	**Medicolegal importance of Organ transplantation**
2	-------	2	**Operative precautions and Diagnosis of death**
2	-------	2	**Medical syndicate**
2	-------	2	**Professional secrecy**
2	-------	2	**Female circumcision**
2	-------	2	**Physician disciplinary proceeding**
2	-------	2	**Domestic Violence**

2	-------	2	**Euthanasia (Mercy death)**
2	-------	2	**Ethics in medical research**
2	-------	2	**Medical reports**
2	-------	2	**Rules of using addictive drugs among physicians**
2	-------	2	**Medical certificates**
/ (.hr 36) W2	-------	(36 hr.) 2/W	**Total**

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

Course Coordinator: Dr. Morid Malak Hanna

Head of Department:
Prof. Dr. Irene Atef Fawzy

مسمى المقرر	جزء اول ماجستير جراحة مخ و اعصاب
كود المقرر	NS 200
	medical Ethics Course

.....جامعة/أكاديمية : .....المنيا

.....كلية / معهد: .....الطب البشرى

.....قسم: .....الطب الشرعى والسموم ألكلينكية

A. The Matrix of Coverage of Course IL by Contents

Contents	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Medical Responsibility and Duties of the physician	A1,3	B4	C1	D1,2
Medicolegal aspect of cloning	A1,2	B3	-	-
Defensive medicine	A4,5	B6	C3	D3
Diagnosis of death & Death Certificates	A1,2	B2	-	-
Consent in medical field	A2,5	-	-	-
Medical malpractice	A1,6	B5	C4	D5
Medicolegal importance of Organtransplantation	A5,6	B3	-	-
Operative precautions and Diagnosis of death	A1,2,3	-	-	D4
Medical syndicate	A2,4,5	B2	-	D1.2,3
Professional secrecy	A2,4,6	-	C2	-
Female circumcision	A1,3,4	B1	-	-
Physician disciplinary proceeding	A1,2	-	-	-
Domestic Violence	A3,4	-	C1,2	D1.2

Euthanasia (Mercy death)	**A1,4**	**B1,2**	**-**	**-**
Ethics in medical research	**A1,6**	**B3,5**	**C3**	**D1,4**
Medical reports	**A1,5**	**-**	**-**	**-**
Rules of using addictive drugs among physicians	**A2,6**	**-**	**C4**	**-**
Medical certificates	**A1,4**	**B1,2**	**-**	**-**

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

	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	
	knowledge			
	needed			
	gained			
	&			
	Understanding			
	needed			
	gained			

D. General & Transferable Skills

	A	B	C	D
Lecture	**A1,2,3,4,5,6**	**B1,2,3,4,5,6**	**C1,2,3,4**	**D1,2,3,4,5**
Practical				
Clinical (Including grand rounds)				
Presentation/seminar Journal club Thesis discussion	**A1,2,3**	**B1,2,3**	**C1**	**D1,2**
Training courses &	**B1-2-3**	**C1**	**D1,2**	
A1 workshops				

C. Matrix of Coverage of Course ILOs by 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 Practical exam Clinical exam	**A1,2,3,4,4,5,6**		**B1,2,3,4,5**	
Oral Exam Assignment Structured oral exams	**A1,2,3,4,4,5,6**	**B1,2,3,4,5**	**C1**	**D1,2**

Blueprint of Forensic Medicine and Clinical Toxicology Department

Blueprint of 1st master of Neurosurgery

Postgraduates" Medical Ethics Examination Paper (40 marks)

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

6	**Operative precautions and Diagnosis of death**	2	70	30	**5.55**	1	1	**2.22**	**---**	**---**	**2.22**	**2**

7	**Medical syndicate &Professional secrecy**	4	80	20	**11.1**	1	1	**4.44**	---	---
8	**Physician disciplinary proceeding & Euthanasia (Mercy death)**	4	75	25	**11.1**	1	1	**4.44**	---	---
9	**Domestic Violence**	2	70	30	**5.55**	1	1	**2.22**	---	---
10	**Ethics in medical research**	2	75	25	**5.55**	1	1	**2.22**	---	---
11	**Medical reports & Medical certificates**	4	80	20	**11.1**	1	1	**4.44**	---	---
12	**Rules of using addictive drugs among physicians**	2	75	25	**5.55**	1	1	**2.22**	---	---
	Total	**36**			**100%**			**40**		**40**

S

Course (8): Neurosurgery

Neurosurgery, course specification for Master degree in Neurosurgery (Second part)

University: *Minia*
Faculty: *Medicine*
Department: Neurosurgery Last
date of approval: 3 /2023

1. Course Information		
· **Academic Year/level:** Second Part of Master Degree	· **Course Title**: Second Part of Master Degree in Neurosurgery	· **Code**: NS200
· **Number of teaching hours:** **Lectures:** 540 hours; 12 hours/week; 45 weeks (1.5 teaching years) **Practical:** 180 hours; 4 hours/week; 45 weeks (1.5 teaching years) **Total:** 720 hours;16hours/week; 45 weeks (1.5 teaching years)		
2. Overall Aims of the course	***By the end of the course the student must be able :to*** Acquire the basic Knowledge and surgical skills necessary for Neurosurgery in clinical reasoning, diagnosis and management of diseases including Shock-Multiple Injured Patients-Neck swelling.	
3. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***		

A- Knowledge and Understanding	*:The student finishes the course; he will be able to* a.1 Define the principles of basics of Neurosurgery, acid base balance and mangement of multiple injred patients b.2 Identify the facts and principles of the relevant basic and clinically supportive sciences related to Neurosurgery

	b.3 Describe the basic ethical and medicolegal principles revenant to the Neurosurgery b.4 Identify the basics of quality assurance to ensure good clinical care in Neurosurgery b.5 Recognize the ethical and scientific principles of medical research b.6 State the impact of common health problems in the field of Neurosurgery on the society
B- Intellectual Skills	*The student finishes the course; he will be able to:* b.1 Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to Neurosurgery b.2 Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Neurosurgery b.3 Design and present cases , seminars in common problem b.4 Formulate management plans and alternative decisions in different situations in the field of the Neurosurgery

C- Professional and Practical Skills	*After completing the course, the student should be able to:* c.1 Obtain proper history and examine patients in caring and respectful behaviors c.2 Order non invasive/invasive diagnostic procedures: Basal laboratory investigation and X-ray skull-neck- abdomen- chest- upper & lower limbs c.3 Interpret non invasive/invasive diagnostic procedures: Basal laboratory investigation and X-ray skull-neck- abdomen- chest- upper & lower limbs c.4 Perform non invasive/invasive therapeutic procedures inclding operation for multiple injured patients c.5 Prescribe non invasive and invasive therapeutic procedures including treatment of shock and surgical infection c.6 Carry out patient management plans for common conditions related to Neurosurgery including: Acid-base balance, shock, Hemorrhage, Surgical

	infection, and Multiple Injured patient c.7 Use information technology to support patient care decisions and patient education in common clinical situations related to Procedure presentation c.8 Provide health care services aimed at preventing health problems related to Procedure presentation like: Shock, Hemorrhage, and Surgical infection c.9 Provide patient-focused care in common conditions related to Neurosurgery, while working with health care professionals, including those from other disciplines
D- General and transferable Skills	*After completing the course, the student should be able to:* d.1 Perform practice-based improvement activities using a systematic methodology(audit, logbook) d.2 Appraises evidence from scientific studies(journal club) d.3 Conduct epidemiological Studies and surveys d.4 Perform data management including data entry and analysis d.5 Facilitate learning of junior students and other health care professionals

Course Contents -4			
Topic	**Lecture hours/**	**Practical/ Clinical hours/week**	**Total No. of hours hours**
Surgical anatomy.	40	-	40
Anatomy of brain and spine	18	-	18
neurosurgical assessment and investigations	18	-	18
Instrumentation and endoscopy	18	15	33
Cns infections	18	15	33
Congenital anomalies of nervous tract	56	15	71
Head and spine trauma	56	15	71
Brain tumors	40	15	55
spine surgery	70	15	85
Neurovascular .	18	15	55

Peripheral nerve pathologies	40	15	55
Neuroimaging	18	15	33
Neurology for neuro-surgeons.	40	15	55
Operative neurosurgery	40	15	33
D.D of neurosurgery.	40	15	55
Total	**540**	**180**	**720**

Teaching and Learning Methods -5	1. Lectures 2. Clinical/practical rounds: · Bedside tutorial · Case presentation · Group discussion · Problem solving · Operative room tutorial 3. Seminars 4. Training courses 5. workshops 6. Conference attendance 7. Journal club
Teaching and Learning Methods for students with limited Capacity -6	Additional lectures, adjusting time and place of lectures according to their schedule and capacity
Student Assessment -7	

A-Student Assessment Methods	**1- Written exam** to assess the capability of the student for assimilation and application of the knowledge included in the course. The exam involves: · Short essay · MCQs · Problem solving **2- Oral/Clinical exam** to assess the student intellectual and communication skills regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the % of achievement of the intended learning outcomes of the course. The exam involves: · Case sheet · Case discussion · OSCE · Imaging slides
B-Assessment Schedule (Timing of Each Method of	***Assessment 1: one written exam*** *by the end of the course* **Assessment 2: *Oral/Clinical exam,***

Assessment)	*after the written exam* **Formative only assessment:** log .book
C-Weighting of Each Method of Assessment	**Written examination:** 40%; 280 Mark **Oral/Clinical examination**: 60%; 420 Mark **Total**: 100 %; 700 Mark
List of References -8	
A-Course Notes/handouts	Course notes and Staff members print out of lectures and/or CD copies
B-Essential Books	Greenberg handbook of neurosurgery
C- Recommended Text Books	Greenberg handbook of neurosurgery Handbook of spine surgery Youmanns neurosurgery Willikons neurosurgery textbook
D-Periodicals, websites	To be determined and updated during the course .work :**Websites** https://www.medicalpracticewebsitedesign.com / :**Periodicals** 1- International Journal of neurosurgery 2- British Journal of neuroSurgery

Course Coordinator/s

,Dr. **Yasser Ali Kamal**

,Dr. **Mohamed Kamel Mohamed**

:Head of Department **head of neurosurgery unit**

Prof. Dr. **Amr Hamdy**

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

5 / 3 / 2023

مسمى المقرر	جزء ثاني ماجستيرS جراحة المخ و الاعصاب
كود المقرر	NS 200

جامعة/أكاديمية.. : المنيا.
كلية/ معهد..الطب.....
قسم: [الجراحة – جراحة المخ و الاعصاب

A. Matrix of Coverage of Course ILOs By Contents

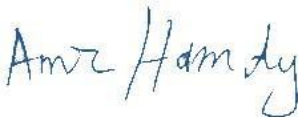
Topic	NO. of hours	Program ILOs Covered (By No.)
Surgical anatomy.	40	**-a1-a2-a3-a4-a5-a6-**
Anatomy of brain and soine	18	**-a1-a2-a3-a4-a5-a6-**
neurosurgical assessment and investigations	18	**-a1-a2-a3-a4-a5-a6-a7-a8-a9-a10-**
Instrumentation and endoscopy	33	**-a1-a2-a3-a4-a5-a6--d4-d5-d6-d7-**
Cns infections	33	**-a1-a2-a3-a4-a5-a6-a7-a8-a9-a10**
Congenital anomalies of nervous tract	71	**-a1-a2-a3-a4-a5-a6-a7-a8-a9-a10**
Head and spine trauma	71	**-a1-a2-a3-a4-c2-c3-d1-d2-d3-d4-**
Brain tumors	55	**-a1-a2-a3-a4-a5-a6-**
spine surgery	85	**-a1-a2-a3- -d5-d6-d7-d8**
Neurovascular .	55	**a5-a6--c1-c2-c3-d1-d2-d3-d4--d8**
Peripheral nerve pathologies	55	**a3-a4-a5-a6-a7-a8-a9-a10-a14-**

Neuroimaging	33	**-a1-a2-a3-a4-a5-a6-d5-d6-d7-d8**
Neurology for neuro-surgeons.	55	**a7-a8-a9-a10-a14-b5-b6-b7-b10-c1-**
Operative neurosurgery	33	**-a1-a2-a3-a4-a5-a6-d5-d6-d7-d8**
D.D of neurosurgery.	55	**-a1-a2-a3-c1-c3-d1-d2-d3-d4-d5-d6**
total	750	

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

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

Journal club	**x**	**x**	**x**	**x**
Thesis discussion	**x**	**x**	**x**	**x**
Training courses & workshops	**x**	**x**	**x**	



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

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

Amr Hamdy

Blueprint of Neurosurgery Master 2nd part Examination Paper

Topic	Hours	Knowledge%	Intellectual%	% of topic	Mark	Actual mark
Surgical anatomy.	40	80	20	7.41	20.74	20.00
Anatomy of brain and soine	20	80	20	3.70	10.37	10.00
neurosurgical assessment and investigations	20	80	20	3.70	10.37	10.00
Instrumentation and endoscopy	20	80	20	3.70	10.37	10.00
Cns infections	20	70	30	3.70	10.37	10.00
Congenital anomalies of nervous tract	56	60	40	10.37	29.04	30.00
Head and spine trauma	56	60	40	10.37	29.04	30.00
Brain tumors	40	60	40	7.41	20.74	20.00
Neurovascular .	70	60	40	12.96	36.30	40.00
Peripheral nerve pathologies	40	60	40	7.41	20.74	20.00
Neuroimaging	40	60	40	7.41	20.74	20.00
Neurology for neuro-surgeons.	19	70	30	3.52	9.85	10.00
Operative neurosurgery	40	70	30	7.41	20.74	20.00
D.D of neurosurgery.	19	70	30	3.52	9.85	10.00
spine surgery	40	70	30	7.41	20.74	20.00
Total	**540**			**100%**		**280**

Amr Hamdy

:Section III

COURSE REPORTS

نموذج رقم (١٦)

تقرير مقرر دراسي

Course report for MSC degree in Human anatomy and embryology
2021 - 2022

University: Minia
Faculty: Medicine
Department: Human anatomy and embryology

A-Basic Information

1- Course Ttitle and Code: MSC in anatomy and embryology (Code: NS 200).

2- Specialty: Human **Anatomy and embryology for neurosurgery**

3- Level/year (1st or 2nd part): 1st part.

4- Number of courses: One course.

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:

- Dr. Nabil hassan abdelkader

B- Professional Information

1. Statistical Information:

- No. of students attended/joined the course	**No:**	1
- No. of students completed the course (attended))the exam).	**No:**	1

Results: **Success percentages & distribution according to the grades of passed students: 100% passed**

- Success percentages: 100%

2- Course Teaching:

- **Course topics taught: one of the following**

Topic	Lecture hours/week	Practical hours/week	Stuff member
Anatomy of CNS: spinal cord and brain stem	**2**	**1**	• Dr. Nabil hassan abdelkader
Anatomy of CNS: brain, ventricular system and central blood supply.	**2**	**1**	• Dr. Nabil hassan abdelkader
Development of the nervous system	**2**	**1**	• Dr. Nabil hassan abdelkader
Functional anatomy of meninges and subarachnoid space.	**2**	**1**	• Dr. Nabil hassan abdelkader
Functional anatomy of the spinal cord tracts and reflexes	**2**	**1**	• Dr. Nabil hassan abdelkader
Functional anatomy of cerebellum and basal nuclei.	2	1	• Dr. Nabil hassan abdelkader
Functional anatomy of brain areas, visual, auditory and somato-sensory pathways.	2		• Dr. Nabil hassan abdelkader
Surgical anatomy of skull, spine and back muscles.	2		• Dr. Nabil hassan abdelkader
Revision	4		
Total	20	9	26

- **Total percentage of the essential course topics that covered: > 95 %**
-
- **Obligation/commitment of the teaching staff to the specified course content:**

>85% [√] **60-84 %** [ ] **<60%** [ ]

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

>85%	√	60-84 %		<60%	

- **Teaching and Learning Methods:**

Lectures	**√**
Practical/laboratory training	**√**
Semester work/class activities	**√**
Training courses and workshops	**√**
Seminars	**√**
Self-learning	**√**

3- Student Assessment:

Method of Assessment	**Marks**	**%**
Written examination paper based exam		**20**
Oral examination		**25**
Practical/ lab skills examination		**5**
Total		**50**

4- Facilities available for Teaching:

- **Scientific references:**

Available	√	Available to some extent		Unavailable	

- **Assistant aids/tools:**

Available		Available to some extent	√	Unavailable	

- **Other materials, supplies and requirements:**

Available		Available to some extent	√	Unavailable	

5- Administrative & regulatory Constraints:

No	**√**	**Yes**	

6- Results of student feedback as a result of course evaluation: Attached to the file

- مشوق ٨٠٪ ج ج ٢٠٪ج
- يرتبط بالتخصص ٩٠٪ ج ج ١٠٪مقبول
- يتضمن معلومات حديثة٩٠٪ ج ج ١٠٪ ج
- يوفر امثلة عملية ٧٠٪ ج ج ٢٠٪ ج ١٠٪ مقبول
- يقابل توقعاتي ٩٠٪ ج ج ١٠٪ مقبول
- مفيد في التطبيق العملى٨٠٪ ج ج ٢٠٪ ج
- مترابط١٠٠٪ ج ج
- له اهداف واضحة١٠٠٪ ج ج
- اكسبني مهارات مهنية٧٠٪ج ج ٣٠٪ مقبول
- يقدم المحاضرات وفقا لمواعيد الجدول ٨٠٪ ج ج ٢٠٪ مقبول
- تغطى المحاضرات كل الموضوعات ٩٠٪ ج ج ١٠٪ ج

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

- Acquiring excellent level of medical knowledge in the discussed courses in anatomy
- Coverage of most of lectures related to neuroanatomy.
- Identification of different anatomical specimens.

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

- Improving laboratory specimens.
- perform the steps of dissection independantely

Action plan for the next academic year:

Fields/areas of course development

Actions Required	Completion Date	Responsible Person
More hours for practical courses	By end 2022	Head of the department Staff members
Searching for funding institutes to get financial support for equipping the laboratory.	By end 2023	Head of the department Staff members
provide human and plastinated specimens	By end 2023	Head of the department
Improving teaching tools and network connections	By end 2022	Head of the department Staff members

- **Program Coordinators:** Dr. Nabil hassan abdelkader

Head of Department: Prof. Dr. Fatma Alzahraa Fouad Abdel- Baky

Date of last update & approval by department council: \ \

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نموذج رقم)١٦(تقرير
مقرر دراسي
Course report of Histology and Cell Biology of 1st part of MSC degree in neurosurgery April 2022

University: Minia

Faculty: Medicine

Department: Histology and Cell Biology

A-Basic Information

8- Course title and Code: Histology & Cell Biology for neurosurgery, NS200

9- Specialty: neurosurgery

10- Level/year (1st or 2nd part): 1st part

11- Number of units: lectures 1 hr/ week, practical 2hrs/week

12- Adopted system for selection & formation of examiners' committee:

Available [√] Not available [ ]

13- System of external evaluation of the exam:

Available [√] Not available [ ]

14- Number & Names of teaching staff members: 10

1. Dr. Azza Hussein Hamouda
2. Dr. Seham Abdelaleem
3. Dr. Nashwa El Tahawy
4. Dr. Rehab Ahmed Rifaai
5. Dr. Soha Abdel Qawy
6. Dr. Ahmed Saied
7. Dr. Sara Naguib
8. Dr. Hanaa Hasaneen Mohammed
9. Dr. Randa Ahmed Ibrahem
10. Dr. Amira Behairy

B- Professional Information

1- Statistical Information:

- No. of students attended/joined the course — No. 1 — % **100**
- No. of students completed the course & attended the exam — No. 1 — % **100**

- Results:

Passed: No: 1 % **100** Failed: No: **0** %

Excellent No: 1 **%** **100** Very good: No: **%**

Good No: **%** Pass: No: **%**

2- Course Teaching:

- **Course topics taught**

Topic	**Lecture** **No. of hours/week**	**Practical or clinical** **No. of hours/ week**	**Staff member name**
1. Blood	1	2	- Dr. Rehab Ahmed - Dr. Amira Behairy
2. Connective tissue	1	2	- Dr. Seham Abdelaleem - Dr. Hanaa Hasaneen
3. Cardiovascular system	1	2	- Dr. Soha Abdel Qawy - Dr. Ahmed Saied
4. Lymphatic system	1	2	- Dr. Ahmed Said - Dr. Rehab Ahmed
5. Nervous tissue	1	2	- Dr. Azza Hussein - Dr. Sara Naguib
6. Central nervous system	1	2	- Dr. Amira Behairy
7. Peripheral nervous system	1	2	- Dr. Randa Ahmed - Dr. Nashwa Al Tahawy

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

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

>85%	√	60-84 %		<60%	

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

>85%	√	60-84 %		<60%	

- Teaching and Learning Methods:

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

3- Student Assessment:

Method of Assessment	Marks	%
Written examination	20	66.7
Oral examination	10	33.3
Practical/ Laboratory examination	-	-
Total	30	100

4- Facilities available for Teaching:

- **Scientific references:**

Available	√	Available to some extent		Unavailable	

- **Assistant aids/tools:**

Available	√	Available to some extent		Unavailable	

- **Other materials, supplies and requirements:**

Available		Available to some extent	√	Unavailable	

5- Administrative & regulatory Constraints:

No	√	Yes	

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

- المقرر له اهداف واضحه (١٠٠٪)
- المقرر يحفزنى على التغيير(١٠٠٪ ج ج)
- مفيد فى التطبيق العملى (٩٠ج) مفيد فى التطبيق العملى (٩٠ج)
- يوفر امثله علميه (١٠٠٪)
- اكسبنى مهارات تفيد فى تكوين شخصيتى (١٠٠٪ ج)
- .

7- External evaluator/s comments:

Course ILOS and their action verbs need revision.

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

- Face book group (Histologist)
- You tube channel (DrAzza Hussein channel –DrAhmed elsayed channel)

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

- student hand out.

16- Action plan for the next academic year:

-Fields/areas of course development

Actions Required	Completion Date	Responsible Person
More seminars and Work shops	2023	All staff members

More laboratory facilities	**2024**	Head Department
Uploading recorded lectures on official site of the Faculty.	**2023**	All staff members

Coordinator:

1. Assisstant Prof. Soha Abdel Qawy

Head of department:

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

Date of <u>last update</u> & approval by department Council: 8 / 2022

رقم نموذج ١٦) تقرير مقرر دراسي
Course Report of Pathology, MSC of Neurosurgery
May (2022)

University: Minia

Faculty: Medicine

Department offering the course: Pathology

Program on which the course is given: Master (MSC) of neurosurgery

A-Basic Information

17- **Course Ttitle and Code:** Pathology, NS200

18- **Specialty:** neuroSurgery

19- **Level/year:** 1st part of MSC of General Surgery

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

Lectures	46	+	Practical/clinical	22

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

Available	√	Not available	

22- **System of external evaluation of the exam:**

Available	√	Not available	

23- **Number & Names of teaching staff members:**

All staff members of the department contribute to the delivery of the course.

B- Professional Information

2- Statistical Information:

- No. of students attended/joined the course	No.	1	%	
- No. of students completed the course & attended the exam	No.	1	%	

- Results:

Passed:	No:	**1**	%		Failed:	No:	**0**	%	

- Ssuccess percentages & distribution according to the grades of passed students:

Excellent	No:		%		Very good:	No:	1	%	
Good	No:		%		Pass:	No:		%	

2- Course Teaching:

- **Course topics taught**

Topic	Lecture No of hours/week	Practical/Clinical No of hours/week	Staff member name
Cell injury and cell death	4	2	Dr. Nisreen Abd El Tawab
Inflammation	4	2	Dr. Heba Tawfik
Bacterial infection	2	-	Dr. Rabab A
Immunopathology	2	-	Dr. Dalia Abdelrehim
Granulomas	4	2	Dr. Dalia Abdelrehim
Repair	2	2	Dr. Manal I Abdelghany
Circulatory disturbances	4	2	Dr. Nisriene Dahy
sturbances of cell growth and adaptation	2	2	Dr. Rehab Kamal
Neoplasia	4	2	Dr. Mariana Fathy
Intracranial hematoma	4	2	Dr. Maram Elhosieny
Brain abscess	6	2	Dr. Rehab Kamal
Brain tumors	4	2	Dr. Al Zahra
Hydrocephalus	4	2	Dr. Nisreen Abd El Tawab
Total	46	22	

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

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

>85%	√	60-84 %		<60%	

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

>85%	√	60-84 %		<60%	

- Teaching and Learning Methods:

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

3- Student Assessment:

Method of Assessment	Marks	%
Written examination	15	40%
Oral examination	22.5	60%
Practical/ Laboratory examination	-	-
Clinical examination	-	-
Assignments/ activities/log book	No marks, but attendance of lectures & signing the logbook by the staff members is prerequisite for admission to the exam. -	
Other (Specify)	-	-
Total	37.5	100%-

4- Facilities available for Teaching:

- **Scientific references:**

Available	√	Available to some extent		Unavailable	

- **Assistant aids/tools:**

Available		Available to some extent	√	Unavailable	

- **Other materials, supplies and requirements:**

Available		Available to some extent	√	Unavailable	

5- Administrative & regulatory Constraints:

No		Yes	√

- **If yes, please list any inadequacies that impede the course delivery and achievement of ILOs:**

The bylaw needs to be revised regarding the following issues:

- There are no marks identified for the practical exam although there is practical teaching.
- As regards assessment, the course of pathology needs to be separate not in cluster with other courses for proper evaluation.

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

Attached as annex.

7- External evaluator/s comments:

Attached as annex.

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:

- Adoption of new credit hours bylaw
- Availability of lectures' handouts

10- Action plan for the next academic year:

- **Fields/areas of course development**

Actions Required	Completion Date	Responsible Person
Update and revision of course contents in collaboration with GS department	All through the next academic year	Teaching Staff

Increase practical training on proper handling, preservation and delivery of the different samples & biopsies as well as demonstration of scientific writing of a pathology request & supply an adequate information	All through the next academic year	Teaching Staff
Preparation of blueprint	Beginning of next academic year	Teaching Staff
Modification of percentage of questions according to its types in the written exam	End of next academic year	Teaching Staff

Course Coordinator: Dr. Manal Ismail Abdelghany

Head of department: Prof. Dr. Heba Mohamed Tawfik

Date : 5/3/2023

Course report of MSC degree in Neurosurgery
May 2022

University: Minia

Faculty: Medicine

Department: Medical Physiology

A-Basic Information

1- Course Title and Code: Medical Physiology for Neurosurgery, NS200
2- Specialty: Neurosurgery
3- Level/year (1st or 2nd part): 1st part
4- Number of courses: 1 course
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:

- Prof. Dr. Ibrahim Yahia Ibrahim Khalil
- Prof. Dr. Selim Mahmoud Abdel-Hakim
- Prof. Dr. Mariam Yahia Ibrahim Khalil
- Prof. Dr. Hanaa Mohamed Ibrahim
- Prof. Dr. Walaa Hassan Nazmy Sayed
- Prof. Dr. Merhan Mamdouh Ragy
- Prof. Dr. Eman Abd Elmonem Abd Elhameed Elbassuoni
- Prof. Dr. Adel Hussien Saad
- Assistant Prof. Dr. Fatma Farrag Ali Ahmed

B-Professional Information

1- Statistical Information:

- No. of students attended/joined the course — No. 1 — %
- No. of students completed the course& attended the exam — No. 1 — %

- Results:

Passed: No: 1 % Failed: No: %

- Success percentages& distribution according to the grades of passed students:
- Success percentages: 100%

Excellent	No:	1	%	Very good:	No:		%
Good	No:		%	Pass:	No:		%

2-Course Teaching:

- **Course topics taught**

Topic	**No. of Lectures**	**No. of Hours**
1. Physiology of Blood: ● General constituents of blood & their functions. ● Clinical conditions resulting from abnormalities of blood components.	3	6
2. Physiology of Cardiovascular System (CVS): ● Arterial blood pressure (APB); Haemorrhage & Shock.	3	6
3. Physiology of Respiratory system: ● Control of Respiration; Hypoxia & Cyanosis.	2	4
4. Physiology of ANS: ● Distribution; function and common disorders of ANS. ● Chemical transmission in ANS.	3	6

5. Recognize the Physiological basis of Metabolism; ● Body temperature regulation & fever.	1	2
6. Physiology of the Nervous System (NS); ● Membrane potentials, action potentials & synaptic transmission. ● Physiology of Pain (definition, types, body reactions & control). ● Types & functions of sensory areas, tracts & common disorders ● Types & functions of motor areas, tracts & common disorders. ● Stretch reflex, UMNL & LMNL. ● Physiology of Cerebellum & Basal ganglia. ● Neuroendocrinology including Hypothalamus & Pituitary gland.	12	24
Total	24	48

- Total percentage of the essential course topics that actually covered: 80%

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

>85%	√	**60-84 %**		**<60%**	

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

>85%	√	**60-84 %**		**<60%**	

- Teaching and Learning Methods:

Lectures	√
Oral communication & observation Senior staff experience.	√
Self-learning	√

3-Student Assessment:

Method of Assessment
Written examination
Oral examination
Log book

4-Facilities available for Teaching:

- **Scientific references:**

Available	√	Available to some extent		Unavailable	

- **Assistant aids/tools:**

Available		Available to some extent	√	Unavailable	

- **Other materials, supplies and requirements:**

Available		Available to some extent	√	Unavailable	

5- Administrative & regulatory Constraints:

No	√	Yes	

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

نقص الموارد والامكانات الماديه في العمليه البحثيه

7-External evaluator/s comments:

Attached the external evaluator report.

البرنامج مستوفي البيانات الاساسيه و مطابق للمعايير الاكاديميه والقياسيه و يحتوي علي اهداف واضحه و المخرجات توافق الاهداف التعلم

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

Acquire excellent level of medical knowledge in the Medical Physiology.
Coverage of most of lectures related to Medical Physiology.

Action plan for the next academic years:

- **Fields/areas of course development**

Actions Required	Completion Date	Responsible Person
توفير الامكانات الماديه و الاجهزه والميكرسكوبات للعمليه البحثيه واستحداث برامج تحليل النتايج ● Provide new laboratory equipment, Chemicals, Materials, colored posters, charts, atlases, and handouts. ● Improving the teaching tools: Adequate infrastructure: including teaching places; hall and laboratory, comfortable desks, security and safety, screens, computers, video player, digital camera, scanner and colored and lazer printers O Digital library,Computer programs: for designing and evaluating MCQs and other forms of assessment.	**By the end of 2023**	Head of department Dr Walaa Hassan Nazmy اداره الموارد الماليه والبحثيه بالكليه السيد الاستاذ الدكتور عميد الكليه
Scientific meetings arranged by the department AND INVITATION OF the annual conferences of Egyptian Society of Physiological Sciences (ESPS) in our department	Partially completed seminars and thesis presentation were done for more evaluation	Head of department Dr Walaa Hassan Nazmy السيد الاستاذ الدكتور عميد الكليه اداره جامعه المنيا

Coordinator:

- Ass.Prof. Dr. Fatma Farrag Ali
- Dr. Elshymaa Abdel-Hady Abdel-Hakeem
- Dr. Wagdy Nashaat Habib Dr Walaa Hassan Nazmy
-

Head of department

- Prof. Dr. Merhan Mamdouh Ragy

Signature:

Date: 6/3/2023

نموذج رقم (١٦)

تقرير مقرر دراسي

Course report of neurology master course

University: Minia

Faculty: Medicine

Department: Special Medicine – Neurology and psychiatry unit

A-Basic Information

24- Course Ttitle and Code: neurology for neurosurgeons ()

25- Specialty:neurology

26- **Level/year (1st or 2nd part): 2022-2023**

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

Lectures | **48** | + Practical/clinical | **28** |

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

Available | ▯ | Not available | |

29- **System of external evaluation of the exam:**

Available | ▯ | Not available | |

30- **Number & Names of teaching staff members:** 6

Prof. Dr. Nermeen Ali

Prof. Dr. Abdelraoof omar

Prof. Dr. Enas Mahmoud hassan

Ass. Prof. mohamed mammdouh esmail

Dr. Muhammad Khalaf hamza

B- Professional Information

3- Statistical Information:

- No. of students attended/joined the course	No.	1	%	**100**
- No. of students completed the course & attended the exam	No.	1	%	

- Results:

Passed:	No:	**1**	%	**100**	Failed:	No:	**0**	%	**0**

- Ssuccess percentages & distribution according to the grades of passed students:

Excellent	No:		**%**		Very good:	No:	1	**%**	100
Good	No:	**0**	**%**		Pass:	No:		**%**	

2- Course Teaching:

- **Course topics taught**

Topic	**Lecture** **No. of**	**Practical or clinical** **No. of hours/**	**Staff member name**

	hours/week	**week**	
Neuroanatomy and Physiology	**4**	4	Prof. Dr. Nermin Ali
Case taking	**4**		Dr. Muhammad khalaf hamza
Blood supply of the brain	**4**	2	Ass. Prof. Salwa M. Rabee
Hemiplegia and cerebrovascular stroke	**3**	3	Prof. Dr. Abdelraoof omar
Brain Tumors	**4**	-	Ass. Prof. mohamed Mamdouh ismail
Headache and migraine	**2**	-	Prof.Enas mahmoud
Diseases of the Extrapyramidal System	**4**	4	Ass. Prof. mohamed Mamdouh
Demyelinating Diseases	**4**	-	Dr. Muhammad khalaf hamza
Intracranial Infections	**4**	-	Ass. Prof. Salwa M. Rabee
Bladder and rectum	**6**	6	Prof. Dr.nermin ali
Diseases of the Spinal Cord	**6**	6	Prof Dr. Abdelraoof omar
Diseases of the Peripheral Nerves			Dr. Muhammad khalaf hamza
Diseases of the			Prof Enas mahmoud

Muscles			

- Total percentage of the essential course topics that actually covered: 85 %

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

>85%	✓	**60-84 %**		**<60%**	

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

>85%	✓	**60-84 %**		**<60%**	

- Teaching and Learning Methods:

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

3- Student Assessment:

Method of Assessment	**Marks**	**%**
Written examination	40	40
Oral examination	20	20
Practical/ Laboratory examination	40	40

Assignments/ activities/log book		
Other (Specify)		
Total	100	100

4- Facilities available for Teaching:

- **Scientific references:**

Available	✓	**Available to some extent**		**Unavailable**	

- **Assistant aids/tools:**

Available	✓	**Available to some extent**		**Unavailable**	

- **Other materials, supplies and requirements:**

Available		**Available to some extent**	✓	**Unavailable**	

5- Administrative & regulatory Constraints:

No		**Yes**	✓

- **If yes, Please list any inadequacies that impede the course delivery and achievement of ILOs:**

1-Suitable patients for teaching purposes are not readily available
2-No available budget for professional patients
3-Electronic devices used for teaching are not well maintained

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

- N.B. Please insert the results of the questionnaire including the percentage of individual items
- State the proposals of the staff members for course development & enhancement, in response to the issues raised by students.

Staff members decided to train all candidates on using the TMS device and give more time to neurophysiology course and practice.

7- External evaluator/s comments:

- N.B. Please attach the external evaluator report.
- State here the issues that have been raised in that report.
- State the proposals of the staff members for dealing with those issues.

Update scientific data of course

Staff members are working on preparing new updated handouts of their lectures base on latest updates on *ICD-11* and *DSM-5* in psychiatry.

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

- N.B. Please list the issues & actions that have been done in the action plan of the last year.

Increase number of staff members involved in teaching the course lectures

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

- Please list the issues/actions that have not been dealt with and the reasons for non-accomplishment.

Candidates need more practical sessions under supervision for learning psychotherapy

10- Action plan for the next academic year:

- **Fields/areas of course development**

Actions Required	Completion Date	Responsible Person
Updating neurophysiology unit Training the candidates on the use of the new TMS device and its diagnostic and therapeutic techniques	September 2023	Dr. Tasneem Muhammad
Updating the sources of the psychiatry course Using most recent textbooks (according to ICD-11 and DSM-5), and preparing handouts of the lectures by the staff members in the department	September 2023	Dr. Tarek Salem

Course Coordinator: Dr. Tasneem mohamed **Head od department: Prof. Nermin Ali**
Date : 6/3/2023

نموذج رقم (١٦)

تقرير مقرر دراسي

University: Minia

Faculty: Medicine

Department offering the course:general surgery

Program on which the course is given: Master (MSC) of neurosurgery

A-Basic Information

31- **Course Ttitle and Code:** neurosurgery NS200

32- **Specialty:** neuroSurgery

33- **Level/year:** 1st part of MSC of General Surgery

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

Lectures | 46 | + Practical/clinical | 22 |

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

Available | √ | Not available | |

36- **System of external evaluation of the exam:**

Available | √ | Not available | |

37- **Number & Names of teaching staff members:**

All staff members of the department contribute to the delivery of the course.

B- Professional Information

4- Statistical Information:

- No. of students attended/joined the course No. | | % | |

- No. of students completed the course & attended the exam No. [ ] % [ ]

- Results:

Passed: No: [ ] % [ ] Failed: No: [ ] % [ ]

- Ssuccess percentages & distribution according to the grades of passed students:

Excellent No: [ ] **%** [ ] Very good: No: [ ] **%** [ ]

Good No: [ ] **%** [ ] Pass: No: [ ] **%** [ ]

2- Course Teaching:

- **Course topics taught**

Topic	**Lecture** **No of hours/week**	**Practical/Clinical** **No of hours/week**
Antibiotics	4	2
Haemorrhage and Shock	2	-
Anuria	2	-
Blood transfusion	4	2
Fluid and electrolyte balance	2	2
Wound healing	4	2
uture materials	2	2
stoperative complications	4	2
Injuries of intra-abdominal structures	4	2
Polytraumatized patient.	4	2
DVT & pulmonary embolism	4	-
Thyroid and parathyroid gland	4	2

Flaps and grafts	2	-
Facial trauma and fractures	2	-
Acute and chronic limb ischeamia	2	2
Pneumothorax , heamothorax , chest trauma	2	-
Total	46	22

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

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

>85%	√	**60-84 %**		**<60%**	

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

>85%	√	**60-84 %**		**<60%**	

- Teaching and Learning Methods:

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

3- Student Assessment:

Method of Assessment	**Marks**	**%**

Written examination	15	40%
Oral examination	22.5	60%
Practical/ Laboratory examination	-	-
Clinical examination	-	-
Assignments/ activities/log book	No marks, but attendance of lectures & signing the logbook by the staff members is prerequisite for admission to the exam. -	
Other (Specify)	-	-
Total	37.5	100%-

4- Facilities available for Teaching:

- **Scientific references:**

Available	√	**Available to some extent**		**Unavailable**	

- **Assistant aids/tools:**

Available		**Available to some extent**	√	**Unavailable**	

- **Other materials, supplies and requirements:**

Available		**Available to some extent**	√	**Unavailable**	

5- Administrative & regulatory Constraints:

No		**Yes**	√

- **If yes, please list any inadequacies that impede the course delivery and achievement of ILOs:**

  The bylaw needs to be revised regarding the following issues:

  - There are no marks identified for the practical exam although there is practical teaching.
  - As regards assessment, the course of pathology needs to be separate not in cluster with other courses for proper evaluation.

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

Attached as annex.

7- External evaluator/s comments:

Attached as annex.

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:

- Adoption of new credit hours bylaw
- Availability of lectures' handouts

10- Action plan for the next academic year:

- **Fields/areas of course development**

Actions Required	Completion Date	Responsible Person
Update and revision of course contents in collaboration with GS department	All through the next academic year	Teaching Staff
Increase practical training on proper handling, preservation and delivery of the different samples & biopsies as well as demonstration of scientific writing of a pathology request & supply an adequate information	All through the next academic year	Teaching Staff
Preparation of blueprint	Beginning of next academic year	Teaching Staff
Modification of percentage of questions according to its types in the written exam	End of next academic year	Teaching Staff

Course Coordinator: Dr. Yasser Ali

Head of department: Prof. Amr Hamdy

Date : 5/3/2023

Amr Hamdy

نموذج رقم (١٦)

تقرير مقرر دراسي

University: Minia

Faculty: Medicine

Department offering the course: Neurosurgery

Program on which the course is given: Master (MSC) of neurosurgery

A-Basic Information

38- **Course Ttitle and Code:** neurosurgery NS200

39- **Specialty:** neuroSurgery

40- **Level/year:** 2nd part of MSC of NeuroSurgery

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

Lectures	520 hr	+ Practical/clinical	180 hr

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

Available	√	Not available	

43- **System of external evaluation of the exam:**

Available	√	Not available	

44- **Number & Names of teaching staff members:**

All staff members of the department contribute to the delivery of the course.

B- Professional Information

5- Statistical Information:

- No. of students attended/joined the course No. [ ] % [ ]
- No. of students completed the course & attended the exam No. [2] % [ ]

- Results:

Passed: No: [**2**] % [ ] Failed: No: [ ] % [ ]

- Ssuccess percentages & distribution according to the grades of passed students:

Excellent No: [**1**] **%** [**88**] Very good: No: [1] **%** [83]

Good No: [ ] **%** [ ] Pass: No: [ ] **%** [ ]

2- Course Teaching:

- **Course topics taught**

Topic	**Lecture** **No of hours/week**	**Practical/Clinical** **No of hours/week**
Surgical anatomy.	40	-
Anatomy of brain and spine	20	-
neurosurgical assessment and investigations	20	-
Instrumentation and endoscopy	20	-
s infections	20	-
ngenital anomalies of nervous tract	56	15
Head and spine trauma	56	15
Brain tumors	40	15
spine surgery	70	15
Neurovascular .	40	15

Peripheral nerve pathologies	40	15
Neuroimaging	19	15
Neurology for neuro-surgeons.	40	15
Operative neurosurgery	19	15
Total	520	22

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

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

>85%	√	**60-84 %**		**<60%**	

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

>85%	√	**60-84 %**		**<60%**	

- Teaching and Learning Methods:

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

3- Student Assessment:

Method of Assessment	**Marks**	**%**

Written examination	15	40%
Oral examination	22.5	60%
Practical/ Laboratory examination	-	-
Clinical examination	-	-
Assignments/ activities/log book	No marks, but attendance of lectures & signing the logbook by the staff members is prerequisite for admission to the exam. -	
Other (Specify)	-	-
Total	37.5	100%-

4- Facilities available for Teaching:

- **Scientific references:**

Available	√	**Available to some extent**		**Unavailable**	

- **Assistant aids/tools:**

Available		**Available to some extent**	√	**Unavailable**	

- **Other materials, supplies and requirements:**

Available		**Available to some extent**	√	**Unavailable**	

5- Administrative & regulatory Constraints:

No		**Yes**	√

- **If yes, please list any inadequacies that impede the course delivery and achievement of ILOs:**

  The bylaw needs to be revised regarding the following issues:

  - There are no marks identified for the practical exam although there is practical teaching.
  - As regards assessment, the course of pathology needs to be separate not in cluster with other courses for proper evaluation.

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

Attached as annex.

7- External evaluator/s comments:

Attached as annex.

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:

- Adoption of new credit hours bylaw
- Availability of lectures' handouts

10- Action plan for the next academic year:

- **Fields/areas of course development**

Actions Required	Completion Date	Responsible Person
Update and revision of course contents in collaboration with GS department	All through the next academic year	Teaching Staff
Increase practical training on proper handling, preservation and delivery of the different samples & biopsies as well as demonstration of scientific writing of a pathology request & supply an adequate information	All through the next academic year	Teaching Staff
Preparation of blueprint	Beginning of next academic year	Teaching Staff
Modification of percentage of questions according to its types in the written exam	End of next academic year	Teaching Staff

Course Coordinator: Mohamed Kamel mohamed
Head of neurosurgery unit Prof Medhat Elsawy

Head of department: Prof. Amr Hamdy

Date : 5/3/2023

Amr Hamdy

كلية الطب

Faculty of Medicine

MINIA UNIVERSITY

Minia university
Department of surgery

Programme Report of Master degree in Neurosurgery

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	Master Degree (MSc) in Neurosurgery (NS200)
2-Speciality: التخصص	Neurosurgery
3-No of program's years: عدد السنوات الد ارسية	2 years
4- No of courses عدد المقر ارت	7 courses include: 1. Surgical Anatomy 2. Histology 3. Surgical Pathology 4. physiology 5. Neurology 6. General surgery 7. Neurosurgery
5- Roles that regulate formation of examiners committees: annex أسس تشكيل لجان الممتحنين	Depending on the department council and faculty rules and according to the specialties
6-External examiners' system: نظام الممتحنين الخارجيين	Available (√) not available ( )

B- PROFESSIONAL INFORMATION

7-Statistics إحصائيات	
-No of Students joined the program عدد الطالب الممتحقين بالبرنامج	yaM 2022 - (1st Part) - 10 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 االلتحاق بالبرنامج (منسوبة الى االعداد الممتحقة بالبرنامج خالل آخر **3** سنوات)	Increasing (√) Constant ( ) Decreasing ( )
-Final Exam results نتائج االمتحان النيائي	Passed … %
-Distribution of success grades (%) %( ) توزيع تقدي ارت النجاح	Excellent (1) Very good (1) good ( ) Pass ( )

8- Academic standards المعايير االكاديمية	
- Academic reference standards (ARS): المعايير االكاديمية المرجعية	• Minia faculty of medicine adopted the general national academic reference standards provided by the national authority for quality assurance and accreditation of education (NAQAAE) for all postgraduate programs. (Faculty Council No. 182, decree No. 7163 dated:14/9/2009. • faculty Council decree No.7528, in its cession No.191, dated: 15\3\2010 •Then, Neurosurgery department has developed the ILOS) for Master (MSc) program in Neurosurgery

- Knowledge & Understanding: المعمومات والمفاييم	**By the end of the study of Master program in Neurosurgery the candidate should be able to:** a.1 Explain the essential facts and principles of relevant basic sciences including Pathology, Anatomy, Histology and Physiology, pharmacology and biochemistry related to Neurosurgery. a.2 Recognize essential facts of clinically supportive sciences including Neurosurgery. a.3 Identify etiology, pathogenesis, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to Neurosurgery. a.4 Identify the basic ethical and medicolegal principles that should be applied in practice and are relevant to the Neurosurgery. a.5 Identify the basics and standards of quality assurance to ensure good clinical care practice in the field of Neurosurgery. a.6 Identify the ethical and scientific principles of medical research in Neurosurgery. 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. a.8 Identify recent advances techiques and procedursin the practice of Neurosurgery
- Intellectual skills الميا ارت العقمية	**By the end of the program the candidate should be able to:** b.1 Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the Neurosurgery. b.2 Solve problems of common clinical situations related to Neurosurgery using an investigatory and analytic thinking

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

	systematic methodology d.2 Perform data management including data entry and analysis using information technology to manage information, access online medical information; and support own education. d.3 Maintain therapeutic and ethically sound relationship with patients. d.4 Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices. d.5 Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors. d.6 Practice cost-effective health care and resource allocation that does not compromise quality of care. d.7 Assist patients in dealing with system complexities. d.8 Be aware of the importance of life-long self-learning and show a strong commitment to it. d.9 Organize material from different scientific sources including library, electronic and online resources. d.10 Dealing effectively with unethical behavior of other members of healthcare team.
- Students' support system (students with limited capabilities & those with outstanding performance): طرق دعم الطالب (ذوي القد ارت المحدودة والمتميزين)	• Special sessions to explain any difficult part for students to understand • Different schedule according to their ability (putting time tables that not overlaps their teaching schedule) • Rewarding students who provide good seminars
-External reference standards for the program (Benchmark):	• Minia faculty of medicine adopted the standards provided by "Accreditation

معايير القياس المرجعية لمبرنامج	council for graduate Medical Education" (http: acgme.org). (Date and NO. of faculty council approval). ● Comparison between ARS of Master program in Minia faculty of medicine & External benchmarks.
-Program handbook: دليل البرنامج	Available (√) Not available ( )
-Program review process: نظام 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 االكاديمي للبرنامج مع المستهدف من التعليم	The matrix of program ILOs vs courses
-Administrative and regulatory constrains: المعوقات اإلدارية والتنظيمية	● Cost and inavailabilty of Simulation-based education to allow training on complex procedures ● Surgical trainees on rotating shifts are often not able to attend scheduled learning opportunities such as lectures, and tutorials ● Lack of resources

9-Students assessments to measure achievement of program intended learning outcomes (ILOs)	
-Assessment tools/methods: أدوات التقويم	1. Research (Thesis) 2. Written Exams: Short essay MCQs Complete 3.Practical Exams 4. Oral Exams 5.Seminars, presentations, assignments 6.log book
-Timetable/schedule: المواعيد	**First Part**: (≥6 months=1 semester): ● At least six months after registration should pass before enrolling for the first part

	examination.

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

	thesis and accepted at least one month before aking for the second part exam. • The duration of registered Master degree should not be more than 4 years till agreement of the Department council (after taking opinion of supervisors) and Faculty council.
-External evaluator comments: (if present) مالحظات الم ارجع الخارجي (إن وجدت(	

1- Educational resources:

Ratio of teaching staff to student numbers نسبو اعضاء بيئو التدريس عمى راس العمل الى الطالب	Sufficient
- Suitability of staff members specialties as well as distribution of teaching loads for program's needs مدى مالئمة تخصصات أعضاء بيئة التدريس وتوزيع ألعباء عمييم طبقا الحتياجات البرنامج	Suitable ( ) Suitable to some extent (√) Non- Suitable ( ) (why?) …… …….. ……
-Library: المكتبة	Suitable ( ) Suitable to some extent (√) Non- Suitable ( ) (why?) …… …….. ……
-Laboratories/clinical places: أماكن التدريب االكمينيكي/المعامل	Suitable ( ) Suitable to some extent (√) Non- Suitable ( ) (why?) …… …….. ……
-Computers/computer labs: الحاسب آللي	Suitable ( ) Suitable to some extent (√) Non- Suitable ( ) (why?) …… …….. ……

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

2- Quality management & development system

ادارة الجودة والتطوير

- The follow up system for areas of Weakness: نظام المتابعة لجوانب القصور	Effective ( ) Effective to some extent (√) Not effective ( ) (Why?) …….. …… …… .
Implementation of faculty and university bylaws: إج ارءات تطبيق لوائح وقوانين الكمية والجامعة	Suitable ( ) Suitable to some extent (√) Non- Suitable ( ) (why?) …….. …… …… .
-Effectiveness of internal evaluation/audit process in program development: مدى فاعمية نظام الم ارجعة الداخمية في تطوير البرنامج	Good
-External evaluators' comments on program ILOs and assessment standards: مالحظات الم ارجعين الخارجيين فيما يخص مخرجات البرنامج ومعايير القياس	

3- Program development suggestions:

مقترحات تطوير البرنامج

(المقر ارت / الساعات) هيكل البرنامج	including more subspecialities
-New courses: مقر ارت جديدة	--
-Training and skills: التدريب والميا ارت	More training on minimally invasive surgical procedures and Simulation-based training for complex procedures
- Health sector/stockholders' suggestions for program development: مقترحات قطاع االعمال والجيات 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
-Program structure (courses / hours):	more practical hours

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

❖ **Action Plan:**

Program Coordinator:

1. Dr. Yasser Ali Kamal
2. Dr. mohamed kamel mohamed

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

Head of Department: Professor Dr. Amr Hamdy

head of neurosurgery unit

Prof.Dr Medhat Elsawy