

University: MINIA

Faculty(s): MEDICINE

Department: Orthopedic surgery and Traumatology

A- Basic Information:

1- Program title: Master Degree in ***Orthopedic surgery and Traumatology***

, Code OT200

2- Program type: Single ☒ Double ☐ Multiple ☐

3- Department responsible for offering the degree: Orthopedic surgery and Traumatology

4-Head of depatment: Prof/ Ahmed Omar Youssef

Assistant coordinators: Prof. Ahmed Fathy Sadek

5-External evaluator: **Prof/ Faisal Fahmy Adam**

6- Internal evaluator: **Prof /Mohamed El-Shafie**

7- Last date of program specifications approval: 6-3-2023

B- Professional Information:

1- Program aims:

Grad u ate of Mas t er D egree in the Orthopedic surgery and Traumatology cand idates Should be able to:

- 1.1 To enable the candidates to specialize in the field of Orthopedics and Traumatology aiming to reach a high level of clinical experience and competence in the area of Orthopedics and Traumatology.
- 1.2 Enable the candidates to interact with community problems, respect ethical values according to community culture.
- 1.3 To introduce the candidate to the basics of scientific medical research.
- 1.4 To enable candidates to understand and get the best of published scientific research and do their own.

2- Intended learning outcomes (ILOs) A- Knowledge and understanding:

- A1- Recognize the basic scientific physiological and anatomical knowledge related to human musculoskeletal system and other related problems.
- A2- Identify the basic pathological and microbiological disorders underlying different Orthopedics and Traumatology problems.
- A3-Recognize the essential facts of clinically supportive sciences including general and vascular surgery, Advanced Trauma Life Support and Basic science related to bone and joints.
- A4-Describe different management modalities for common Orthopedics and Traumatology problems, based on recent update knowledge of the etiology, pathogenesis, diagnosis, prevention and treatment
- A5- Recognize the common drugs used in Orthopedics and Traumatology.

A6- Mention the basic ethical and medico-legal principles that should be applied in practice and relevant to Orthopedics and Traumatology.

A7- Mention the ethical and scientific principles of medical research methodology.

A8- State the impact of common health problems in the field of Orthopedics and Traumatology on the society and how good clinical practice improves these problems.

B- Intellectual skills

B1. Analyze symptoms & signs and construct a differential diagnosis for common Orthopedics and Traumatology complaints.

B2. Design an appropriate diagnostic plan for evaluation of common Orthopedics and Traumatology complaints taking into consideration the nature of the clinical situation and the risks, benefits and costs to the patient.

B3. Interpret the results of different investigations related to common Orthopedics and Traumatology complaints.

B4. Formulate treatment plans for common and rare Orthopedics and Traumatology problems taking into account the cultural and individual needs.

B5. formulates a scientific study on a research problem.

C- Professional and practical skills

C1- Correlate the facts of relevant basics and clinically supportive sciences with clinical reasoning, diagnosis, management of the common Orthopedics and Traumatology disorders, through an investigatory and laboratory thinking approach.

C2- Examine patients presenting with signs of common and rare Orthopedics and Traumatology disorders efficiently

C3- Practice the basic surgical procedures in Orthopedics and Traumatology.

C4- Manage all Orthopedics and Traumatology emergencies properly.

D- General and transferable skills

By the end of the program the candidates should be able to;

D1. Communicate with the patients to gain their confidence.

D2. Respond effectively to a patient's emotional and psychosocial concerns.

D3. Obtain proper history and examine patients in caring and respectful behaviors.

D4. Communicate with other health care providers.

D5. Appreciate team working.

D6. Achieve Computer skills necessary to make use of medical data bases and use the internet for communication.

D7. Show administrative skills that enable him to fulfill the paper work needed.

D8. Show leadership skills that enable him to organize work and lead the juniors and paramedical staff.

D9. Write scientific articles according to the basics of scientific research.

3- Program Academic Reference Standards

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 session No.177 Dated: 18/5/2009). {Annex 1}.

- Minia faculty of medicine has developed the academic standards (ARS) for Master (MSc) program and was approved in faculty Council decree No.7528, in its session No.191, dated: 15-3-2010, last update: 20-2-2023 {Annex 1}.
- Then orthopedic surgery and traumatology department has developed the intended learning outcomes (ILOs) for master (MSc) program in Orthopedic surgery and traumatology and the Date of program specifications first approval was by department council: 13-5-2013, last update: 6-3-2023 {Annex 2}.

4. Program External References

- Minia faculty of medicine adopted the standards provided by "Accreditation council for graduate Medical Education" (<http://acgme.org>). (Faculty Council decree No.7528, in its session No.191, dated: 15\3\2010).

5. Program Structure and Contents:

5. A. Curriculum Structure and Contents

5.A1- Program duration ...2-4 years...5.B- Program structure

5.B.1- No. of hours per week:

N.B. {Courses’ specifications are present in Annex 3} & {Correlations of Program ILOs withcourses are present in Annex 4}.

First part (30% from final marks)

Program-related basic courses (6 months). Students are allowed to sit the exams of these coursesafter 6 months from applying to the master degree.

Subject	No. of hours per week	
	Theoretical	Practical
Anatomy and embryology	2	4
Histology		
Physiology	3	---
Pathology	2	2
Pharmacology	2	---
Medical ethics and malpractice	1	---
Microbiology and immunology	2	1
General surgery	4	3
Total hours	15	10

Second part (70% from final marks)

Minimum 18 months

Program –related academic and specialized science courses and ILOs

Students are not allowed to sit the exams of these courses before 2 years from applying to themaster degree

Subject	No. of hours per week	
	Theoretical	Practical
Orthopedic surgery	6	9
traumatology	2	4
Total hours	8	13

Master Thesis

All master-degree students should prepare a thesis in one of the given subjects put by the scientific committee of Orthopedics and traumatology. The department and the ethical committee of the department must approve the protocol of the research. The thesis should include a review part and a research part. The Thesis is supervised by one or more senior staff members from the Orthopedics and traumatology department and may include other specialties according to the nature of the research. The thesis should be evaluated and approved by a committee of three professors including one of the supervisors and an external professor. Approving the thesis is mandatory to allow the student to set for the final exam.

6- Program 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. Candidate should complete the house office training year.
- C. Follows postgraduate regulatory rules of Minia faculty of medicine.

2. Specific requirements:

- A. Candidates graduated from Egyptian universities should "Good Rank" in their final year/cumulative years examination and grade "Good Rank" in **Orthopedics and traumatology** course too.
- B. Candidate should know how to speak and write English well.
- C. Candidate should have computer skills.

7- Regulations for progression and program completion:

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

First Part: (≥6 months):

- All courses as specified in the internal by law
- At least 6 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% in the written exam).
- Those who fail in one curriculum need to re-exam it only.

Thesis/essay:

- Start from registration and should be completed, and accepted at least after passing the 1st part examination and at least one month before allowing to enter 2nd part final exam.

- Accepting the thesis is enough to pass this part 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 Courses.
- Actual work for 18 months (72 weeks) as a demonstrator /trainee in the department of Orthopedics and traumatology
- The student should pass the 1st part before asking for examination in the 2nd part
- 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% in the written exam).
- 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:
 - a. Training courses
 - b. Seminars
 - c. Thesis discussion
 - d. Workshops
 - e. Conference attendance
 - f. Other scientific activities requested by the department

8- Teaching and learning methods

Lectures – practical-seminars – journal club – training courses & workshops - thesis discussions

9-Methods of student assessment:

Method of assessment	The assessed ILOs
1. Research (Thesis)	a. 5,6,7 b. 3,4 c. 2,3 d. 2,3
2. Written Exams: <ul style="list-style-type: none"> • Short essay • MCQs • Commentary 	a. 1,2,3,4,5,6,7,8 b. 1,2,3,4 c. 1,2
3. Practical/Clinical Exams	b. 1,2,4 c. 1,2,3,4
4. Seminars, presentations, assignments	a. 3,4 b. 1 c. 3 d. 1,2,3,4,5,6,7,8,9
5. Oral Exams	a. 1,2,3,4 b. 1,2,4 c. 1,2
6. Logbook assessment	All

Weighting of assessments

Courses		Degrees			
First Part	Cours e Code	Writte n Exam	Oral Exam	Practic al / Clinical Exam	Total
Basic Courses:					
Anatomy and embryology		15	22.5		37.5
Physiology		12	18		30
General surgery		30	22.5	22.5	75
Microbiology pathology		15	22.5		37.5
		15	22.5		37.5
histology		15	22.5		37.5
pharmacology		12	18		30
Biochemistry		6	9		15
Medical ethics and malpractice		40	60		100
Total #		120	180		300
Second Part					
Specialized Courses:					
Orthopeic Surgery		140	210	210	
Traumatology		140			
Total		280	210	210	700

Total degrees 1000 marks 300 marks for the 1st part 700 marks for the 2nd part

9. Methods of Program Evaluation:

Evaluator (By whom)	Method/tool	Sample
1. Senior students (Students of final years)	Questionnaires	Attached to the file
2. Graduates (Alumni)	Questionnaires	Attached to the file
3. Stakeholders	Meeting Questionnaires	Attached to the file Attached to the file
4. External & Internal evaluators and external examiners	Reports	Attached to the file
5. Quality Assurance Unit	Reports Questionnaires Site visits	Attached to the file Attached to the file Attached to the file

Date of approval by Department council (3/2023)

Head of the Department

Prof/ Ahmed Omar Youssef

Coordinators

 Prof.Dr/ Ahmed Fathy Sadek

Comparison between National Academic Quality Assurance & Accreditation (NAQAAE) General Academic Reference Standards (GARS) and Faculty Academic Reference Standards (ARS) and that of Orthopedics and traumatology department

NAQAAE برنامج الماجستير	General Academic Reference Standards of Faculty Master (MSC) Programs, Faculty of Medicine Minia University	Orthopedics and traumatology Academic Reference Standards of Faculty Master (MSC) Programs, Faculty of Medicine Minia University
مواصفات الخريج خريج برنامج الماجستير يجب ان يكون قادرا على	1. Graduate Attributes: Graduate of master (MSC) program should be able to:	1. Graduate Attributes: Graduate of master (MSC) program of Orthopedics and traumatology should be able to:
1.1. اجادة تطبيق أساسيات البحث العلمي واستخدام وسائله المختلفة	1.1. understanding and applying of basics of research method and research tools	1.1. Understand the basic sciences involved in the science of Orthopedics and traumatology and adequate handling of this scientific background in such manner that include them in Orthopedics and traumatology research.
2.1. تطبيق المنهج التحليلي واستخدامه في مجال التخصص	2.1. Critically analyze, evaluate, and effectively communicate findings, theories, and methods	2.1. Utilization of different information obtained from clinical observation or Orthopedics and traumatology cases together with Orthopedics and traumatology related scientific basics and results of researches proposed in the related field to elicit conclusions and exclude criticized findings.
3.1. تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في ممارسته المهنية.	3.1. Apply integrated professional and general knowledge in his scholarly field and at the interface between different fields.	3.1. Effectively use scientific background of basic science and clinical observations to know the aspects of interconnection of different clinical spectra especially those strongly merged with Orthopedics and traumatology and how to solve this entangled situation.
4.1. إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص.	4.1. Demonstrate awareness of community health needs related to the field of specialization by understanding the beneficial interaction with the society to improve quality of life	4.1. Show attention to the priorities of Orthopedics and traumatology patient prevention and treatment taking surrounding environmental consideration including social, economic interactions and its effect on the proposed individual and
5.1. تحديد المشكلات المهنية و إيجاد حلول لها.	5.1. Demonstrating proficiency, required to solve current complex problems in his scholarly field.	5.1. Ability to make an initial management approach to majority of the Orthopedics and traumatology related cases to reached a provisional diagnosis and triage of emergency cases.
6.1. إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية.	6.1. Master a variety of technical skills in his scholarly field and expert relevant equipment, technology, and software.	6.1. Effectively use information technology to report or register cases and related finding, bring information about specific Orthopedics and traumatology related issues and handling of software program in such manner that allow him to acquire knowledge in the field.

7.1. لتواصل بفاعلية و القدرة على قيادة فرق العمل.	7.1. Gain leadership skills and be able to communicate efficiently with colleagues and get the best results.	7.1. Acquisition of formal hierarchy of command and proper delegation of authority using fair and unbiased rules that is distributed evenly across layers of health care provider and optimize collaboration towards the best of patient and community needs.
8.1. اتخاذ القرار في سياقات مهنية مختلفة.	8.1. Take professional situational decisions and logically support them.	8.1. Ability ot make decision making in different clinical Orthopedics and traumatology cases and make argument about their managing plans.
9.1. توظيف الموارد المتاحة بما يحقق أعلي استفادة و الحفاظ عليها	9.1. Optimal use of available resources to achieve research or best patient health care and ensure its maintenance.	9.1. identification of different sources including patients, attendees, seniors and possible facilities & equipment to make useful research for Orthopedics and traumatology problems and the best way to solve it and consolidate resolution of the condition.
10.1. إظهار الوعي بدوره في تنمية المجتمع و الحفاظ على البيئة في ضوء المتغيرات.	10.1. Demonstrate awareness of its role in community health development and	10.1. Well comprehension of its role as a health care provider in the field of Orthopedics and traumatology and eexhbiton of good collaborative model with all health care sectors to promote health of the community.
11.1. التصرف بما يعكس اللتزام بالنزاهة و المصادقية و اللتزام بقواعد المهنة.	11.1. Exhibit ethical behavior that reflect commitment to the code of practice	11.1. acquisition of ethical attitude with patients, colleagues and related employee and attendee.
12.1. تنمية ذاته أكاديميا و مهنيا و قادرا علي التعلم المستمر.	12.1. Demonstrate the ability to sustain a lifelong personal and professional growth.	12.1. Development of self evalauation and self-learning tools that enables him form continuously catching the advances in the Orthopedics and traumatology and keep in track with the different technical feasibilities in Orthopedics and traumatology practice.

ANNEX 2 : ARS VS. MSc program of Orthopedic surgery and traumatology

<p>2. المعايير القياسية العامة:</p> <p>NAQAAE General Academic Reference Standards "GARS"for</p>	<p>2. ILOs of Faculty Academic Reference Standards (ARS) for Master Program</p>	<p>2. ILOs of Orthopedics and traumatology ARS for master program</p>
<p>2.1. المعرفة والفهم : بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا علي الفهم والدراية بكل من:</p>	<p>2.1. Knowledge & Understanding: Upon completion of the Master Program , the graduate should have sufficient knowledge and understanding of:</p>	<p>2.1. Knowledge & Understanding: Upon completion of the Master Program of orthopedic surgery and traumatology , the graduate should have sufficient knowledge and understanding of:</p>
<p>2.1.1. النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة</p>	<p>2.1.1. Understand the scientific basis and modern knowledge in the field of specialization and related medical sciences</p>	<p>A1- Recognize the basic scientific physiological and anatomical knowledge related to human musculoskeletal system and other related problems.</p>

2.1.2. التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة	2.1.2. The mutual influence of professional practice on work environment, working conditions, and job characteristics.	A2- Identify the basic pathological and microbiological disorders underlying different Orthopedics and Traumatology problems.
2.1.3. التطورات العلمية في مجال التخصص	2.1.3. Scientific developments in the field of specialization	A3-Recognize the essential facts of clinically supportive sciences including general and vascular surgery, Advanced Trauma Life
2.1.4. المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص	2.1.4. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors	A4-Describe different management modalities for common Orthopedics and Traumatology problems, based on recent update knowledge of the etiology, pathogenesis, diagnosis, prevention and treatment
2.1.5. مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص	2.1.5. Quality principles in the scholarly field	A5- Recognize the common drugs used in Orthopedics and Traumatology.
2.1.6. أساسيات وأخلاقيات البحث العلمي	2.1.6. Basis of research methodology and medical ethics.	A6- Mention the basic ethical and medico-legal principles that should be applied in practice and relevant to Orthopedics and Traumatology.
2.2. المهارات الذهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	2.2. Intellectual Skills: Upon completion of the master program, the graduate should be able to:	2.2. Intellectual Skills: Upon completion of the master program of orthopedic surgery and traumatology, the graduate should be able to:
2.2.1. تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل	2.2.1. Use judgment skills for analytical and critical problem solving	B1. Analyze symptoms & signs and construct a differential diagnosis for common Orthopedics and Traumatology complaints.
2.2.2. حل المشاكل المتخصصة مع عدم توافر بعض المعطيات	2.2.2. Capable of integrating knowledge and dealing with complex subjects to solve problems	B2. Design an appropriate diagnostic plan for evaluation of common Orthopedics and Traumatology complaints taking into consideration the nature of the clinical situation and the risks, benefits and costs to the patient.
2.2.3. الربط بين المعارف المختلفة لحل المشاكل المهنية	2.2.3. Be capable of integrating research results and/or results of history, physical and laboratory test findings to solve a research or a clinical problem.	B3. Interpret the results of different investigations related to common Orthopedics and Traumatology complaints.
2.2.4. إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية	2.2.4. Effectively apply research methods and carrying out a medical research thesis	B5. formulates a scientific study on a research problem.

2.2.5. تقييم المخاطر في الممارسات المهنية في مجال التخصص	2.2.5. Be aware of risk management principles, and patient safety.	B4. Formulate treatment plans for common and rare Orthopedics and Traumatology problems taking into account the cultural and individual needs.
2.2.6. التخطيط لتطوير الأداء في مجال التخصص	2.2.6. Establish goals, commitments, and strategies for improved professional performance in the field of specialty	B3. Interpret the results of different investigations related to common Orthopedics and Traumatology complaints.
2.2.7. اتخاذ القرارات المهنية في سياقات مهنية متنوعة.	2.2.7. Take professional situational decisions and logically support them.	B1. Analyze symptoms & signs and construct a differential diagnosis for common Orthopedics and Traumatology complaints.

3.2. المهارات المهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	3.2. Professional Skills: Upon completion of the master program, the graduate must be able to:	3.2. Professional Skills: Upon completion of the master program of orthopedic surgery and traumatology, the graduate must be able to:
3.2.1. إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص.	3.2.1. Master the basic and some advanced professional skills in his scholarly field.	C1- Correlate the facts of relevant basics and clinically supportive sciences with clinical reasoning, diagnosis, management of the common Orthopedics and Traumatology disorders, through an investigatory and laboratory thinking approach.
3.2.2. كتابة و تقييم التقارير المهنية.	3.2.2. Write and evaluate medical or scientific reports	C2- Examine patients presenting with signs of common and rare Orthopedics and Traumatology disorders efficiently
3.2.3. تقييم الطرق والأدوات القائمة في مجال التخصص	3.2.3. Assess and evaluate technical tools during research	C3- Practice the basic surgical procedures in Orthopedics and Traumatology.
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, the graduate should be able to:	4.2. General and transferable skills Upon completion of the master program orthopedic surgery and traumatology, 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.	D1. Communicate with the patients to gain their confidence.
4.2.2. 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.	D6. Achieve Computer skills necessary to make use of medical data bases and use the internet for communication. D9. Write scientific articles according to the basics of scientific research.
4.2.3. لتقييم الذاتي وتحديد احتياجاته التعليمية الشخصية	4.2.3. Assess himself and identify personal learning needs	D3. Obtain proper history and examine patients in caring and respectful behaviors.
4.2.4. استخدام المصادر المختلفة للحصول على المعلومات والمعارف	4.2.4. Use various sources for information (physical and digital sources).	D4. Communicate with other health care providers.
4.2.5. وضع قواعد ومؤشرات تقييم أداء الآخرين	4.2.5. Setting indicators for evaluating the performance of others	D4. Communicate with other health care providers.
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	D5. Appreciate team working.
4.2.7. إدارة الوقت بكفاءة	4.2.7. Manage time efficiently	D7. Show administrative skills that enable him to fulfill the paper work needed.
4.2.8. التعلم الذاتي والمستمر	4.2.8. Demonstrate skills of self-learning and lifelong learning needs of medical profession.	D8. Show leadership skills that enable him to organize work and lead the juniors andparamedical

Program courses matrixes with ILOs

Program part	Structure	Content	Courses	Covered ILOs			
				A	B	C	D
First part	Basic science courses	Obligatory courses	Anatomy & Embryology Course	A1	B3	C1	D9
			Histology Course	A1	B3	C1	D9
			Biochemistry Course	A1	B3	C1	D9
			Physiology Course	A1	B3	C1	D9
			Pharmacology course	A1	B3	C1	D9
			Microbiology & immunology Course	A1	B3	C1	D9
			Pathology Course	A1	B3	C1	D9
			General surgery Course	A1	B3	C1	D9
			Medical ethics and malpractice	A1	B3	C1	D9
Second part	Compulsory courses of orthopedic	Specialized courses	Orthopedic surgery	A1:8	B1:5	C1:4	D1:9A
			Traumatology	A1:8	B1:5	C1:4	D1:9A

B.Matrix of Coverage of Course ILOs by Methods of teaching and learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1:8	B1:5		
Practical sessions:			C1:4	
Presentation/seminar Journal club Thesis discussion Training courses & workshops				D1:9

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
Research (thesis)	A5,6,7	B3,4	C2,3	D2,3
Written exam	a1,a2, a3,a4,a5,a6, a7,a8	b1,b2,b3,b4	C1,2	
Practical exam		B1,2,4	C1,2,3,4	

Oral Exam	a1,a2, a3,a4	b1,b2,b4	C1,2	
Seminars, presentations, Assignments	A3,4	B1	C3	D1:9
Logbook assessment	All			

Course Specifications of Anatomy and Embryology in Master degree in orthopedics

University: Minia

Faculty: Medicine

Department: Anatomy

1. Course Information		
<input type="checkbox"/> Academic Year/level: first part	<input type="checkbox"/> Course Title: Course Specifications of Anatomy and Embryology in Master degree in orthopedics	
<input type="checkbox"/> Number of teaching hours: - Lectures: Total of 26hours - Practical/clinical: Total of 10 hours		
2. Overall Aims of the course	<i>By the end of the course the student must be able to:</i> to have the have the professional knowledge anatomy and embryology of musculoskeletal system.	
3. Intended learning outcomes of course (ILOs):		
<i>U on completion of the course, the student should be able to:</i>		
A- Knowledge and Understanding	A1. Mention the normal structure and function of the musculoskeletal system on the macro levels. A2. Understand early embryo development & normal growth and development of the bones, muscles and cartilage. A3. List the recent advances in the abnormal structure, function, growth and development of limbs and spine A4. Demonstrate the anatomical basis of surface anatomy and radiologic anatomy	
B- Intellectual Skills	B1. Relate between knowledge for Professional problems solving. B2. Conduct research study and / or write a scientific study on a research problem. B3. Interpret of diseases based on anatomical disruptions. B4. Establish goals to improve performance in the field of	

	anatomy of the visual system.
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C- Professional and Practical Skills	C1. practice the basic and modern medical skills in the area of orthopedics and traumatology. C2.Evaluate 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/week	Practical/Clinical hours/week	Total No. of hours hours/week
Anatomy of bones, joints and muscles of upper limb.	4	2	6
Normal and abnormal development of the upper limb.	4	2	6
Anatomy of bones and joints of lower limb.	2	1	3
Development and anomalies of the lower limb.	3	1	4
Anatomy of the vertebral column and chest wall articulation.	2	1	3
Normal and abnormal development of the spine.	3	-	3
Nerve supply and blood supply of the upper limb.	4	-	4
Lumbar and sacral plexus.	2	1	3
Revision	2	2	4
Total	26	11	37

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

A. Student Assessment Methods	1- Assignments for the students to empower and assess the general and transferable skills 2- Periodic written exam to assess Knowledge, understanding and Intellectual skills. 3 3Final written exam to assess Knowledge, understanding and intellectual skills. 4- Final oral exam to assess understanding and intellectual skills.
B. Assessment Schedule (Timing of Each Method of Assessment)	Assessment 1... Periodic 1... Week: 10-13 Assessment 2 ... Assignment.... Week: 15-16 Assessment 3....periodic. 2.... Week ...18-20 Assessment 2 ...Final practical exam Week: 26-28 Assessment 3.... Final written exam. Week ...26-28 Assessment 4.....Final oral exam Week....26-28
C. Weighting of Each Method of Assessment	Final-term Examination 15 Oral Examination. 22.5 <hr/> Total 37.5

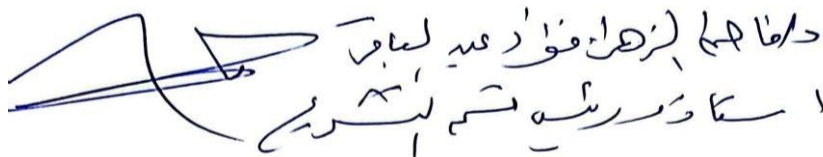
8. List of References: <ul style="list-style-type: none"> - Standring, S, Ellis, H., Healy, J.C., Johnson, D., and Williams, J.C., 2016. Gray's anatomy. 50th edition. - Junqueira, L.C. and Carneiro, J., 2015. Basic histology. 10th edition. - Moore K.L., and Agur A.M.R., 2016. Essential clinical anatomy. 14th edition. 	
A. Course Notes/handouts	Lecture notes prepared by staff members in the department.
B. Essential Books	Gray's Anatomy.
C. Recommended Text Books	A colored Atlas of Human anatomy and Embryology.
D. Periodicals, websites	American J. of Anatomy Cochrane Library, Medline & Popline

Course Coordinator/s:

Dr. Medhat Atta Salah

Head of Department:

Prof. Dr. Fatma Alzahraa Fouad Abdel- Baky



Date of last update & approval by department Council:

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نموذج رقم (11)

التشريح	مسمى المقرر
AN200	كود المقرر

جامعة/أكاديمية :
المنيا

كلية / معهد: الطب 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 bones, joints and muscles of upper limb.	1	1,2,4	1,2,3	1	1,3,5
Normal and abnormal development of the upper limb.	2	2,3	2,3	2	2,4
Anatomy of bones and joints of lower limb.	3	1,4	2,3	1,2	3,4
Development and anomalies of the lower limb.	4	1,4	1,4	1,2	4,5
Anatomy of the vertebral column and chest wall articulation	5	2,4	1,2	1	1,2,5

Normal and abnormal development of the spine.	6	2,3	2	2	2,4
Nerve supply and blood supply of the upper limb.	7	1,4	1,4	1,2	4,5
Lumbar and sacral plexus.	8	2,4	1,2,3	2	1,2,4,5

Revision	9	1,2,3,4	1,2	1	1,2,3,5
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B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of learning and teaching	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	2,3,4	1,2	1	1,3,5
Practical	2,3	2	2	2,4
Clinical (Including grand rounds)	3,4	2,3	1,2	3,4

Presentation/seminar	1,4	1,4	1,2	4,5
Journal club	2,4	1,2	1	1,2,4
Thesis discussion	4	4	1	1,3,5
Training courses & workshops	3,4	1,4	1,2	2,4

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

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

Oral Exam	12,3,4	1,2,4	1,2	4,5
Assignment	2,4	1,2	1	1,2,5

**Blue print of Human Anatomy and Embryology Department for
master degree 1st part examination paper of Orthopedics**

	Topic	Hours	Knowledge%	Intellectual %	% topic	No. of items per topic	Knowledge mark	Intellectual mark	Mark	Actual mark
1	Anatomy of bones, joints and muscles of upper limb.	4	60%	40%	16.6%		1.5	1	2.49	2.5
2	Normal and abnormal development of the upper limb.	4	67%	33%	16.6%		1.7	0.8	2.49	2.5
3	Anatomy of bones and joints of lower limb.	2	67%	33%	8.3%		0.7	0.3	1.2	1
4	Development and anomalies of the lower limb.	3	60%	40%	12.5%		1.2	0.8	1.8	2
5	Anatomy of the vertebral column and chest wall articulation.	2	75%	25%	8.3%		0.9	0.3	1.25	1.25

6	Normal and abnormal development of the spine.	3	67%	33%	12.5%		1.3	0.7	1.8	2
7	Nerve supply and blood supply of the upper limb.	4	75%	25%	16.6%		1.9	0.6	2.49	2.5
8	Lumbar and sacral plexus.	2	67%	33%	8.3%		0.8	0.4	1.25	1.25
	Total	24					10	5	15	15



Faculty of Medicine

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

University: Minia

Faculty: Medicine

Department: Medical Biochemistry

Last date of approval 3\2023

1. Course Information		
Academic Year/level: First Part of Master Degree	Course Title: First Part of Master Degree in Orthopedic Surgery	Code:
Number of teaching hours: Lectures: 30 hours; 1.5 hours/week		
2. Overall Aims of the course	<p><i>By the end of the course the student must be able to:</i></p> <ol style="list-style-type: none"> 1. Provide the postgraduate student with the medical Knowledge and skills essential for the practice of specialty and necessary to gain. 2-To understand all molecular basics and diseases. 3-To know different molecular techniques and their advanced applications. 	

	<p>4-To better understand and use the research tools including internet and different laboratory equipment.</p> <p>5-To know retrieving the literature and understanding the evidence-based medicine</p> <p>6-Maintain learning abilities necessary for continuous medical education.</p> <p>7-Maintain research interest and abilities.</p>
<p>3. Intended learning outcomes of course (ILOs): <i>Upon completion of the course, the student should be able to:</i></p>	
A- Knowledge and Understanding	<p>The student finishes the course; he will be able to achieve the following objectives:</p> <p>A1. Illustrate various metabolic processes of carbohydrate, lipid and protein</p> <p>A2. Describe role of minerals and hormones and Vitamins in metabolism.</p> <p>A3. Discuss Various metabolic diseases and their diagnosis</p> <p>A4. List the role of enzymes in the chemical reactions in the body and its diagnostic importance.</p> <p>A5. Discuss types of gene therapy and its therapeutic effect.</p> <p>A.6. Describe the metabolism of hemoglobin and nucleic acids.</p> <p>A.7- Explain xenobiotics and their detoxification.</p> <p>A8- Explain principles, methodologies, tools and ethics of scientific research.</p>
B- Intellectual Skills	<p>B1-Interpret the skills for analysis of different diseases to reach a final diagnosis.</p> <p>B2-Correlate the ability to solve problems associated with metabolic diseases.</p> <p>B3-Develop the ability to integrate metabolic pathways with diseases.</p>
C- Professional and Practical Skills	<p>After completing the course, the student should be able to</p> <p>C1. Organize groups, as a leader or as a colleague.</p> <p>C2. Practice willingly the presentation skills through the attendance and participation in scientific activities.</p>

)hours))hours)	hours
1. Carbohydrate Metabolism	6	---	6
2. Lipid metabolism	6	---	6
3. Protein metabolism	3	---	3
4. Purines and pyrimidine Metabolism	1.5	---	1.5
5. Enzymes	1.5	---	1.5
6. Minerals	3	---	3
7. Hormones	1.5	---	1.5
8. Vitamins	3	---	3
9. Xenobiotics	1.5	---	1.5
10. Gene Therapy	1.5	---	1.5
11. Hemoglobin metabolism	1.5	---	1.5
Total	30	---	30

5-Teaching and Learning Methods	1-Lectures & discussions. 2-Assignments 3-Attending and participating in scientific conferences and workshops to acquire the general and transferable skills needed
6-Teaching and Learning Methods for students with limited Capacity	Additional lectures, adjusting time and place of lectures according to their schedule and capacity
7- Student Assessment	
A-Student Assessment Methods	1- Written exam to assess the capability of the student for assimilation and application of the knowledge included in the course. 2-Oral exam to assess the student intellectual and communication skills regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the % of achievement of the intended learning outcomes of the course
B-Assessment Schedule (Timing of Each Method of Assessment)	<i>Assessment 1: one written exam by the end of the course</i> <i>Assessment 2: Oral exam, after the written exam</i> Formative only assessment: log book.
C-Weighting of Each Method of Assessment	Written examination: 6 marks Oral examination: 9 marks Total: 15 marks
8- List of References	
A-Course Notes/handouts	Lectures notes are prepared in the form of a book authorized by the department.
B-Essential Books	-Harper's Biochemistry, Robert K. Murray, Daryl K. Granner, Peter A. Mayes, and Victor W. Rodwell (32th edition, 2022)
C- Recommended Text Books	Lubert Stryer, Biochemistry (9 th edition, 2019) Lehninger, Biochemistry (8th edition, 2021) Lippincott, Biochemistry (7th edition, 2017)

D-Periodicals, websites	<p>To be determined and updated during the course work.</p> <p>Websites: 1-http://www.Medical Biochemistry.com.</p> <p>Periodicals: 1- International journal of biochemistry 2- Science Direct</p>
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Course Coordinator/s:

Dr. Ahmed Mohamed, Dr. Heba Marey

Head of Department:

Prof. Dr. Salama Rabie Abd El Rahiem



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

مسمى المقرر	جزء أول ماجستير جراحة العظام
كود المقرر	

جامعة الكاديمية: المنيا
كلية المعهد: الطب
قسم: الكيمياء الحيوية

A. Matrix of Coverage of Course ILOs By Contents

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

6. Minerals	6	A2 A3	B1	C1	
7. Hormones	7	A2 A3	B3	C2	
8. vitamins	8	A2 A3	B1	C2	
9. Xenobiotics	9	A7	B1 B3		
10. Gene Therapy	10	A5	B3	C1	
11. Hemoglobin metabolism	11	A3 A6	B2	C2	

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

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

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

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

	Topic	Hours	Know ledge %	Intellec tual %	% of topic	No of items per topic	Knowledg e		I ntellectual		Mark s	Actu al mark
							No of Item s	Mar k	No of Items	Mark		
1	Carbohy drate Metaboli sm	6	70	30	20	2	1	0.6	1	0.6	1.2	1
2	Lipid metaboli sm	6	75	25	20	2	1	0.6	1	0.6	1.2	1
3	Protein metaboli sm	3	75	25	10	2	1	0.3	1	0.3	0.6	0.5
4	Purines and pyrimidi ne Metaboli sm	1.5	75	25	5	2	1	0.15	1	0.15	0.3	0.5
5	Enzymes	1.5	70	30	5	2	1	0.15	1	0.15	0.3	0.5
6	Minerals	3	80	20	10	2	1	0.3	1	0.3	0.6	0.5
7	Hormon es	1.5	75	25	5	2	1	0.15	1	0.15	0.3	0.5
8	Vitamins	3	75	25	10	2	1	0.3	1	0.3	0.6	0.5
9	Xenobiot ics	1.5	70	30	5	2	1	0.15	1	0.15	0.3	0.75
10	Gene Therapy	1.5	75	25	5	2	1	0.15	1	0.15	0.3	0.75
11	Hemoglo bin metaboli sm	1.5	70	30	5	2	1	0.15	1	0.15	0.3	0.5
	Total	30			100 %						6	6

نموذج رقم (12)

Course Specifications of Histology for master's degree (1st part) in Orthopedic Surgery and Traumatology

University: Minia

Faculty: Medicine

Department: Histology and Cell Biology.

1. Course Information

Academic Year/level: master's degree (1st part) in Orthopedic Surgery and Traumatology

Course Title: Histology and Cell Biology

Code: OT200

□ Number of teaching hours: 66

- Lectures: **Total of 24 hours; 1 hours/week**

- **Practical/clinical:** Total of 42 hours; 2 hours/week

2. Overall Aims of the course

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

1. Provide the postgraduate student with the medical Knowledge and skills essential for the practice of specialty and necessary to gain.
2. Provide master student with basic information about the structure and function of connective tissue, bone, cartilage and muscle.
3. Maintenance of learning abilities necessary for continuous medical education.
4. Maintenance of research interest and abilities.

3. Intended learning outcomes of course (ILOs):

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

A- Knowledge and Understanding	A1. Define the histological structure of body tissues and organs.
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	<p>A2. List the structure and function of the different cells and organs.</p> <p>A3. List the basic abnormalities that might affect the tissue as a result of diseases.</p> <p>A4. Identify the ability of different tissue to regenerate following the treatment of diseased condition.</p>
B- Intellectual Skills	B1. Interpret histological changes in diseases compared to the normal histology
C- Professional and Practical Skills	<p>C1. Teamwork, practicing and participation in scientific activities.</p> <p>C2. Master the basic and modern medical skills in the area of specialty.</p> <p>C3. Examine histological slides and identify the structure of different cells and organs.</p>
D- General and transferable Skills	<p>D1. Practice in groups, as a leader or as a colleague.</p> <p>D2. Use the advanced biomedical information to remain current with advances in knowledge and practice (self-learning).</p> <p>D3. Play role in the medical progress by having advanced medical information.</p> <p>D4. Be aware about the presentation skills through the attendance and participation in scientific activities.</p>

4. Course Contents

Topic	Lecture hours/week	Practical/Clinical hours/week	Total No. of hours hours/week
Introduction	1	-	1
Histology of blood (part1)	1	2	3
Histology of blood (part 2)	1	2	3
Histology of 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
Histology of bone 1	1	2	3
Histology of bone 2	1	2	3
Histology of bone 3	1	2	3
Histology of cartilage 1	1	2	3
Histology of cartilage 2	1	2	3
Histology of cartilage 3	1	2	3

Histology of skeletal muscle 1	1	2	3
Histology of skeletal muscle 2	1	2	3
Histology of cardiac muscle	1	2	3
Histology of smooth muscle	1	2	3
Revision	1	-	1
Revision	1	-	1
Total	24	42	66
5. Teaching and Learning Methods	1. lectures& group discussions . 2. practical lessons. 3.Assignments for the students to empower and assess the general and transferable skills.		
6. Teaching and Learning Methods for students with limited Capacity	Additional lectures, adjusting time and place of lectures according to their schedule and capacity		
7. Student Assessment:			
A. Student Assessment Methods	<ul style="list-style-type: none"> - Final written exam to assess Knowledge, understanding and intellectual skills. - Final oral exam to assess understanding and intellectual skills. 		
B. Assessment Schedule (Timing of Each Method of Assessment)	Assessment 1: one written exams by the end of the course. Assessment 2: Oral exam, after the written exam. Formative only assessment: simple research assignment, logbook.		

C. Weighting of Each Method of Assessment	Final-term written examination 15 Oral Examination 22.5 Total 37.5
8. List of References	
A. Course Notes/handouts	Notes of the department and practical notebook
B. Essential Books	1- Basic histology, Junqueira et al. 2- Bloom and fawcett: Cnscise Histology. Fawcett., 3- Cell biology and histology. Gartner et al. 4-Lippincott Illustrated review:integrated systems 5-Oxford Handbook of Medical sciences
C. Recommended Text Books	Wheater's Functional Histology A Text and Colour Atlas. 7th Edition - April 3, 2023. - Human Histology, Stevens and Lowe.
D. Periodicals, websites	Web Sites: To be determined and update during the course work. 1- http://www.histology-world.com . 2- http://histo.life.illinois.edu/histo/atlas/slides.p hp Periodicals: 1- Cytology and 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

Coordinators:

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

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

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

نموذج رقم (11أ)

Orthopedic Surgery and Traumatology	مسمى المقرر
OT200	كود المقرر

..... المنيا : جامعة/أكاديمية

..... الطب : كلية / معهد

..... الهستولوجي : قسم

M 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)

Connective tissue (part 1)

Connective tissue (part 2)

Connective tissue (part 3)

5	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
6	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
3	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
4	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4

Lymphatic system 1	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 2	10	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
	Lymphatic system 3	11	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
	Histology of bone 1	12	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
		13	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
	Histology of bone 2	14	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
	Histology of bone 3	15	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4

Histology of cartilage 1	16	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Histology of cartilage 2	17	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Histology of cartilage 3	18	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Histology of smooth muscle 1	19	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Histology of skeletal muscle 2	20	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Histology of cardiac muscle	21	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Histology of smooth muscle	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		

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

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	A1,A2,A3,A4	B1	C1,C2,C3	D1,D2,D3,D4
Training courses & workshops				

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's degree in orthopedic surgery "first part" examination paper (12 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	-	4.1						0.5
2	Blood	2	80	20	8.3						1.5
3	Connective tissue	3	80	20	12.5						2
4	Cardiovascular system	3	80	20	12.5						2
5	Lymphatic system	3	80	20	12.5						2
6	Respiratory system	2	80	20	8.3						1.5
7	bone	3	80	20	12.5						1.5
8	cartilage	3	80	20	12.5						2
9	Muscular tissue	4	80	20	16.6						2
	Total	24			100%						15

Course Specifications of Medical Microbiology and Immunology for Orthopedics master program (OT200)

University: Minia

Faculty: Medicine

Department: Medical Microbiology and Immunology

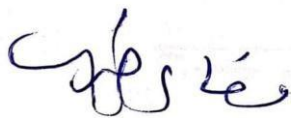
1. Course Information			
Academic postgraduate students	Year/level:	Course Title: Medical Microbiology and Immunology for Orthopedics master postgraduate students.	Code: OT200
<div>- Number of teaching hours:</div> <div>- Lectures: Total of 40 hours; 2 hours/week</div> <div>- Practical/clinical: Total of 5 hours</div>			
1.Overall Aims of the course		By the end of the course the student must be able to: 1. Know the different types of pathogens, their structure and pathogenesis 1. Know the different methods for laboratory diagnosis and control of different infectious agents. 3. Know the different molecular microbiological techniques and their applications. 4. Know the basics of the host-parasite relationships and the role of the immune system in defending the body against different pathogens and its role in health and disease. 5. Know the principles of biosafety measures and aseptic precautions.	
3.Intended learning outcomes of course (ILOs): Upon completion of the course, the student should be able to:			

A-Knowledge and Understanding	<p>A1. Know microbial morphology, structure, metabolism and physiology of medically significant microorganisms</p> <p>A2. Understand the basis of microbial genetics and biotechnology techniques and their applications.</p> <p>A3. Recognize the taxonomy and classification of different microorganisms.</p> <p>A4. Identify the natural habitat, source of infection and mode of transmission of the different classes of pathogens causing postoperative infections.</p> <p>A5. Identify the different levels of host-parasite relationship and recognize the microbial virulence factors</p> <p>A6. Recognize the role of the immune system in the health and disease of the human being.</p> <p>A7. Know the causes, sources, mode of transmission and treatment of nosocomial infections and know the different methods for infection control in operative rooms.</p>
B-Intellectual Skills	<p>B1. analyze of different cases of infection to reach a final diagnosis and microbiological identification of the causative organism</p> <p>B1. Develop the ability to solve problems associated with different infections such as microbial resistance to antimicrobial agents, reach a final diagnosis of a certain pathological condition caused by an infectious organism.</p>
C- Professional and Practical Skills	<p>C1. Apply professional applications such as managing a microbiology laboratory.</p> <p>C2. Identify different microbes at microbiology laboratory using basic techniques</p> <p>C3. Apply standards of infection control</p> <p>C4. Apply standard protocol in collection of pathological samples</p>
D-General and transferable Skills	<p>D1. Manipulate microbiological samples and reach a microbiological diagnosis of an infection. D2. Write protocols for identification of a given microorganism.</p> <p>D3. Communicate with colleagues and patients regarding a case caused by a microorganism.</p> <p>D4. Work in/with different groups.</p> <p>D5. Manage a microbiological laboratory.</p>

Topic	Lecture hours/week	Practical/Clinical hours/week	Total No. of hours hours/week
1. Introduction and collection of pathological samples		1	1
2. Cleaning, sterilization and disinfection		1	1
3. Antimicrobial chemotherapy	2	1	3
4. Bacteremia, toxemia and toxic shock	2		2
5. Fever	2		2
6. Laboratory techniques used in epidemiology		1	1
7. Basic immunology 1	2		2
8. Basic immunology 2	2		2
9. Hypersensitivity reactions	2		2
10. Staphylococci	2		2
11. Mycobacterial infections	2		2
12. Streptococci	2		2
13. General virology	2		2
14. Viral Hepatitis	2		2
15. Human immunodeficiency	2		2
16. Covid-19	2		2
17. Bacterial, viral and fungal respiratory tract infections	2		2
18. Bacterial, viral and fungal GIT infections	2		2
19. Bacterial, viral and fungal CNS infections	2		2
20. Blood-transmitted diseases	2		2
21. Osteomyelitis	2		2
22. Nosocomial infections	2		2
23. Infection control and Occupational safety	2	1	3

Total	40	5	45
5.Teaching and Learning Methods	Lectures Practical sessions Seminars		
6.Teaching and Learning Methods for students with limited Capacity	Self-learning activities such as use of internet and multimedia.		
7.Student Assessment			
A.Student Assessment Methods	End of course written exam: A paper based exam to assess the student’s comprehension and understanding of the class work Oral exam: to assess student’s intellectual and communication abilities regarding basic knowledge and understanding of the course topics.		
B.Assessment Schedule (Timing of Each Method of Assessment)	End of course exam (written and oral exams) Week 23		
C.Weighting of Each Method of Assessment	Final written Examination: 15 marks Oral Examination: 22.5 marks Total 37.5 marks		
8.List of References			
A. Course Notes/handouts	Department Books, and notes on Medical Microbiology and Immunology by microbiology department, Faculty of medicine, Minia university		
B. Essential Books	Jawetz, Melnick and Adelberg's Medical Microbiology 17th edition by Riedel. S (2019); McGraw-Hill Education Review of Medical Microbiology and Immunology 17th edition by warren levinson (2022); McGraw-Hill Education		
C. Recommended Text Books	Janeway's Immunobiology 9 th edition by Kenneth Murphy and Casey Weaver , (2016); Garland Publishing Inc. NY, London.		
D. Periodicals, websites	TBD and updated during the course work		
Course Coordinator: Dr. Dalia Nabil			
Head of Department : Prof. Dr. Wafaa Khairy			

Daye of last update : 3/2023

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A. Matrix between ILOs and course topics

Contents (List of course topics)	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
1. Introduction and collection of pathological samples	A3 A5 A7	B1	C1,C4	D4 D5
2. Cleaning, sterilization and disinfection	A3 A5 A6	B1	C1,C4	D1 D3
3. Antimicrobial chemotherapy	A1 A5 A6	B1	C1	D1 D3
4. Bacteremia, toxemia and toxic shock	A1 A5 A7	B1 B2	C1, C2	D1 D2 D3
5. Fever	A1	B1	C1	D1 D3 D5
6. Laboratory used in epidemiology	A1	B1	C1,C3	D1 D4
7. Basic immunology 1	A3 A7	B1	C1,C4	D3
8. Basic immunology 2	A1 A2 A4	B1	C1,C4	D1 D3 D4
9. Hypersensitivity reactions	A3 A4 A5	B1 B2	C2	D1
10. Staphylococci	A1,A6, A7	B1	C4	D1 D3 D4
11. Mycobacterial infections	A1 A5	B1 B2	C1, C3	D1 D3 D4

12. Streptococci	A3 A4	B1	C1	D5
13. General virology	A3 A4	B1	C1,C3	D3
14. Viral Hepatitis	A1 A3	B1 B2	C1, C4	D1 D3
15. Human immunodeficiency	A5 A6	B1	C1, 5	D1 D3 D4
16. Covid-19	A1,A2,A3	B1,B2	C1, C3	D1,D1,D3
17. Bacterial, viral and fungal respiratory tract infections	A4 A5 A6	B1	C1	D3 D4
18. Bacterial, viral and fungal GIT infections	A3 A4	B1	C1,C3,C4	D3 D4
19. Bacterial, viral and fungal CNS infections	A1 A2 A3	B1	C1,C2,C4	D4 D5
20. Blood-transmitted diseases	A1 A2 A4 A6	B1	C1, C2,C4	D3 D5
21. Osteomyelitis	A4 A5	B1	C1, C3,C4	D3
22. Nosocomial infections	A1	B1	C1,C2,C4	D4 D5
23. Infection control and Occupational safety	A1 A2 A3	B1	C1,C4	D4

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

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

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1 A2 A3 A4 A5 A6 A7	B1		
Oral Exam	A1 A2 A3 A4 A5 A6 A7	B1		D1D2 D3 D4 D5

Blueprint of Medical Microbiology and Immunology Exam paper for 1st Master of Orthopedics (OT200) (15 marks)

(List of course topics)	HOURS	Intended learning outcomes ILOS		N of item per topic	% of topic	Knowledge & Understanding		Intellectual Skills		Total mark	Actual mark
Contents		Knowledge & Understanding	Intellectual Skills			No of items	mark	No of items	mark		
24. General Microbiology	8	70%	30%	4	20	2	2	1	1	3	3
25. Immunology	6	70%	30%	3	15	2	1.5	1	0.75	2.25	2
26. Bacteriology	6	70%	30%	3	15	2	1.5	1	0.75	2.25	2.5
27. Virology	6	70%	30%	3	15	2	1.5	1	0.75	2.25	2
28. Applied Microbiology	10	70%	30%	5	25	4	2.5	2	1.25	3.75	4
29. Nosocomial Infection and Infection control	4	70%	30%	2	10	2	1	1	0.5	1.5	1.5
Total	40				100%					15	15



Course Specifications of Pathology for 1st Part of Master Degree in Orthopedic surgery and Traumatology

1.Course Information
Course Title: Pathology Code: OT 200 Academic Year/level: Postgraduate, Master degree (1st part). Date of specification approval: 2022/2023
• Number of teaching hours: <ul style="list-style-type: none">- Lectures: Total of 48 hours; 2 hour/week- Practical/clinical: Total of 48 hours., 2 hour/week
2. Overall Aims of the course
<p><i>By the end of the course the student must be able to:</i> 1. Explain theories, basics & recent advances in the field of pathology.</p> <ol style="list-style-type: none">2. Appraise & interpret relevant basic information and correlate them with essential clinical data to reach a final diagnosis3. Plan for the development of acquisition of skills of basic & modern pathological laboratory techniques as well as principals of pathology.4. Demonstrate competency on dealing with various biopsies and reporting pathological features and correlate such information with the relevant provided clinical data.

3. Intended learning outcomes of course (ILOs): *Upon completion of the course, the student should be able to:*



A- Knowledge and Understanding	<p>A.1. Illustrate definition, types of acute inflammation as well as its pathological features and complications</p> <p>A.2. Demonstrate pathological features of chronic inflammation, and granuloma in relation to its morphological and etiological types</p> <p>A.3. Outline examples of granulomas: Define tuberculosis, discuss methods of infection, the sites of primary and secondary infection, pathological features and its fate.</p> <p>A.4. Define repair, fibrosis, and regeneration with examples, explain pathological processes, bone healing and wound healing.</p> <p>A.5. Identify different forms of bacterial infections as</p>
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	<p>bacteraemia, septicaemia, toxemia and pyaemia. Mention their causes and effects on different organs</p> <p>A.6. Explain cellular response to injury, etiology and pathological features of reversible cell injury and irreversible cell injury</p> <p>A. 7. Demonstrate hemodynamic disorders as thrombosis, embolism, ischemia, infarction, haemorrhage, gangrene and edema and mention their causes and effects on different organs.</p> <p>A.8. Classify hypersensitivity reactions and pathogenesis of autoimmune diseases.</p> <p>A.9. Explain each term with examples as hypertrophy, hyperplasia, agenesis, hypoplasia, aplasia and atrophy.</p> <p>Distinguish between the disorders of differentiation of the cells as dysplasia and metaplasia.</p> <p>A.10. Define neoplasia, classification of tumors, describe grading and staging of malignant tumors. Define metastasis, describe mechanism of spread, and Outline the main routes</p> <p>A.11. Identify the pathological features of metabolic bone diseases Osteoporosis, Osteomalacia, Primary hyperthyroidism.</p> <p>A.12. Define osteoarthritis, and its types, Identify Rheumatoid arthritis.</p> <p>A.13. Demonstrate Osteomyelitis, types, pathogenesis, pathological features and complications.</p> <p>A.14. Identify benign and malignant bone tumors, Pathogenesis, and pathological features.</p> <p>A.15. Discuss Giant Cell Lesions of bone.</p>
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B- Intellectual Skills	<p>B.1.Predict the signs and symptoms of a disease based on the underlying gross & microscopic tissue changes .</p> <p>B2. Interpret a pathology report and integrate gross and microscopic findings with the underlying etiology</p> <p>B3. Utilize the obtained information to solve a problem in a case scenario to reach a provisional diagnosis</p>
C- Professional and Practical Skills	<p>C1- Write adequate pathological description concerning main features of gross appearance of a museum specimen</p> <p>C2- Use the light microscope to examine and identify microscopic findings of some selected examples of studied diseases .</p> <p>C3- Learn proper handling of and processing tissue specimens sent for pathological examination.</p> <p>C4- Write a pathological request.</p>
D- General and transferable Skills	<p>D1. Demonstrate efficient communication & interpersonal skills in all its forms and in different situations that may involve senior staff, colleagues, other health care professionals, and patients</p> <p>D.2. Use efficiently the information technology and select reliable sources of information to get essential information and updates regarding the different topics and techniques in surgical pathology.</p> <p>D.3. Develop skills of self-evaluation and identify personal learning needs to plan for self-development and continuous medical education</p> <p>D.4. Demonstrate the skills of effective time management</p>

4.Course content			
Topic	Lecture hours	Practical hours	Total hours
1. Acute inflammation	4	4	8
2. Chronic inflammation and granuloma	2	2	4
3- Granuloma	4	4	8
4- Healing and repair	2	2	4
5- Bacterial infection	2	2	4



6-Cell injury	3	3	6
7-Hemodynamic disorders	4	4	8
8-Immunopathology	2	2	4
9- Cellular adaptation	2	2	4
10. Neoplasia	4	4	8
11-Metabolic bone Diseases	2	2	4
12-Pathology of the joints	3	3	6
13- Osteomyelitis	4	4	8
14- Bone tumors	8	8	16
15-Giant cell lesions	2	2	4
Total	48	48	-
5. Teaching and Learning Methods			

5.1. Lectures: Both face to face & on-line.

5.2. Practical sessions: Gross pathology and histopathology

5.3. Self-learning activities for the topics studied in lectures or related topics; including libraries, Elearning (practical photographs and questions of different topics available online for student's assessments) and consulting professors for gathering information.

5.4. Tutorial & regular weekly seminars, case presentation, training courses & workshops.

6. Teaching and Learning Methods for students with limited Capacity

Not applicable

7. Student Assessment



A. Student Assessment Methods	<p>1. Written exam to assess the acquired knowledge & understanding as well as intellectual skills and essential professional skills.</p> <p>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.</p>								
B. Assessment Schedule (Timing of Each Method of Assessment)	<p>Assessment 1: 1 written exam by the end of course.</p> <p>Assessment 2: Oral exam, after the written exam</p>								
C. Weighting of Each Method of Assessment	<table> <tr> <th>Type of Assessment</th><th>Degree</th></tr> <tr> <td>Written examination</td><td>(15)</td></tr> <tr> <td>Oral examination.</td><td>(22.5)</td></tr> <tr> <td></td><td>• Total (37.5)</td></tr> </table>	Type of Assessment	Degree	Written examination	(15)	Oral examination.	(22.5)		• Total (37.5)
Type of Assessment	Degree								
Written examination	(15)								
Oral examination.	(22.5)								
	• Total (37.5)								
8. List of References									
A. Course Notes/handouts	<p>1 -General pathology course notes prepared by the department staff and printed material of recorded lectures.</p> <p>2- Lectures' Handouts</p>								
B. Essential Books	<p>1- Goldblum, John R., et al. Rosai and Ackerman's Surgical Pathology E-Book. Elsevier Health Sciences (2017).</p> <p>2- Kumar, V., Abbas, A. K., & Aster, J. C. Robbins basic</p>								
	<p>pathology e-book. Elsevier Health Sciences (2017).</p>								
C. Recommended Text Books	<p>1- Liang Jing & David Bostwick. Essentials of anatomic pathology (2011).</p> <p>2- Diana W Molavi. The practice of surgical pathology; A beginners guide to the diagnostic process (2008).</p>								
D. Periodicals, websites	<p>To be determined and updated during the course</p> <p>1-American Journal of pathology</p> <p>2-The Journal of pathology</p> <p>3-Diagnostic Histopathology</p> <p>4-Cancer</p> <p>5- www.pubmed.com</p> <p>6- www.pathmax.com</p>								



Course Coordinator/s:

Assistant Prof. Dr. Maram El-Hussieny Ali



Head of Department

Prof. Dr. Heba Mohamed Tawfik

Date of last update & approval by department Council: 2023

جامعة الكاديمية: المنيا

كلية المعهد: الطب

قسم: باثولوجي

Course Specification Pathology	مسمى المقرر
Master degree of Degree in Orthopedic surgery and Traumatology (First part))	
OT200	كود المقرر

A. The Matrix of Coverage of Course IL by Contents

content	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Acute inflammation	A1	B3	C1	D1,2
Chronic inflammation and granuloma	A2	-	C1	-
Granuloma	A3	B3	C1	D3
Healing and repair	A4	-	C1	-
Bacterial infection	A5	B3	C1	-
Cell injury	A6	B3	C1,C2	
Hemodynamic disorders	A7	B3	C1,C2	-
Immunopathology	A8	B3	C2	D1
Cellular adaptation	A9	-	C1,C2	D1
Neoplasia	A10	B3	C1,C2	D2



Metabolic bone Diseases	A11		C3,C4	D3,D4
Pathology of the joints	A12	B2,B3	C3,C4	D1,D3
Osteomyelitis	A13	B2,B3	C3,C4	D2,D3
Bone tumors	A14	B2,B3	C1,C2,C3,C4	D3
Giant cell lesions	A15	B3	C2,C3,C4	D4

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

Methods of	Intended Learning Outcomes (ILOs)			
Teaching & Learning	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1,2,3,4,5,6,7,8,9,10,11,12,13,14,15	B1,2,3	-	
Practical	-	-	C1,2,3,4	D3,4
Clinical (Including grand rounds)	-	-	-	D1,2,3,4
Presentation/seminar	A11,12,13,14,15	B1,2,3	C1,2,3,4	D1,2,3
Journal club	-	-	-	-
Thesis discussion	-	-	-	-
Training courses & workshops	A13,14,15	B1,2,3	C3,4	D3,4

ILOs



C. Matrix of Coverage of Course by Methods of Assessment



MeAs tho ses ds sm of ent	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1,2,3,4,4,5,6,7,8,9,10,11,12,13,14,15	B1,2,3	-	-
Practical exam	-	-	-	-
Clinical exam	-	-	-	-
Oral Exam	A1,2,3,4,4,5,6,7,8,9,10,11,12,13,14,15	B3	C3,4	D1,2
Assignment	-	-	-	-
Structured oral exams	-	-	-	-



**Blueprint of pathology course for
master degree (1st part)
Tropical Medicine (15 marks)**



No.	Topic	ILOs	Contact Hours	Weight %	Total marks
1	Acute inflammation	A1	4	8.33	1.25
2	Chronic inflammation and granuloma	A2	2	4.16	0.75
3	Granuloma	A3	4	8.33	1.25
4	Healing and repair	A4	2	4.16	0.5
5	Bacterial infection	A5	2	4.16	0.75
6	Cell injury	A6	3	6.24	1
7	Hemodynamic disorders	A7	4	8.33	1.25
8	Immunopathology	A8	2	4.16	0.5
9	Cellular adaptation	A9	2	4.16	0.5
10	Neoplasia	A10	4	8.33	1.25
11	Metabolic bone Diseases	A11	2	4.16	0.5
12	Pathology of the joints	A12	3	6.24	1
13	Osteomyelitis	A13	4	8.33	1.5
14	Bone tumors	A14	8	16.66	2.5
15	Giant cell lesions	A15	2	4.16	0.5
	Total		48	100%	15



Pharmacology course specification for master degree in Orthopedics (First part)

University: Minia

Faculty: Medicine

Department:

**Pharmacology Last date
of approval 1/2023**

1. Basic Information		
<input type="checkbox"/> Academic Year/level: First Part of Master Degree	<input type="checkbox"/> Course Title: First Part of Master Degree in Orthopedics	<input type="checkbox"/> Code:
<input type="checkbox"/> Number of teaching hours: Lectures: 20 hours; 2 Hours/week Practical: 0		
2. Overall Aims of the course	<i>By the end of the course the student must be able to:</i> 1. Provide the postgraduate student with the medical Knowledge and skills essential for the practice of specialty and necessary to gain.	

	<p>2- To acquire all molecular basics and knowledge of diseases.</p> <p>3- To detect different molecular techniques and their advanced applications.</p> <p>4- To better understand and use the research tools including internet and different laboratory equipment.</p> <p>5- To know retrieving the literature and understanding the evidence-based medicine</p> <p>6- Maintain learning abilities necessary for continuous medical education.</p> <p>7- Maintain research interest and abilities.</p>
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3. Intended learning outcomes of course (ILOs):
pletion of the course, the student should be able to:

A.Knowledge and Understanding	<p>1. Mention the basic biochemical and physiological activities, their disturbances and how to be corrected.</p> <p>.2 Define general pharmacokinetics as well specific properties of different groups of drugs putting into consideration age, sex and genetic- related variations that affect the response to drugs (pharmacogenetics).</p> <p>.3 Recall general pharmacodynamics as well specific properties of different groups of drugs that include the drug's mechanism of action and pharmacological effects.</p> <p>.4 List pharmacotherapeutics which reflects the role of drugs in prevention, diagnosis and treatment of diseases as well as prevention of diseases. It includes also pathopharmacology of diseases and drugs, indications, contraindications, adverse reactions and drug interactions specially in high risk groups (extremes of age, pregnancy and lactation, er kidney and cardiac diseases). Pharmaco-economics is included in this category.</p>
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	<p>.5 Memorize Systemic pharmacology which includes drugs acting on different body systems such as cardiovascular, autonomic, respiratory, gastrointestinal, endocrine, blood ,.....</p> <p>A.6 know the basic, and ethics of scientific research.</p>
	<p>.7. List the principles of quality in professional practice the field of therapeutics and applied pharmacology.</p>
A- Intellectual Skills	<p>B.1 Develop the skills in selecting and using drugs safely and efficiently knowing their limits and the potential risks</p> <p>B.2 Develop the ability to solve medical problems arising from use of drugs and the development of resistance or tolerance encouraging them to search for alternative approaches after revising the diagnosis.</p> <p>B.3 Participate in clinical or laboratory risk management activities as a part of clinical governance.</p> <p>B.4 Present and defend his/her data in front of a panel of experts.</p> <p>B.5 Formulate management plans and alternative decisions in different situations in the field of Pharmacology.</p> <p>B. 6.Assess risk in research and experimentation using new drugs and/or chemicals.</p> <p>B.7. Plan for the development of performance in the field of therapeutics and pharmacological researches.</p> <p>B. 8.Assess different clinical problems and formulate pharmacological researches to solve such problems.</p> <p>B.9. Combine knowledge for Professional problems' solving.</p>

<p>B- Professional and Practical Skills</p>	<p>By the end of the study of master program in Pharmacology the candidate should be able to:</p> <p>C.1 Evaluate the need of his/her career to join the major advances in drug information</p> <p>C.2 Perform the basic lab skills essential to the course.</p> <p>C.3 Develop plans for performing experiments related to pharmacology.</p> <p>C.4 Use information technology in some of the pharmacology related situations.</p> <p>C.5 Band better understanding of the normal structure and function.</p>
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<p style="text-align: center;">C- General and transferable Skills</p>	<p>After completing the course, the student should be able to</p> <p>D1- Perform practice-based improvement activities using a systemic methodology (share in audits and risk management activities and use logbooks).</p> <p>D3- Collect and verify data from different sources.</p> <p>D4- Analyze and interpret data.</p> <p>D5-Appraise evidence from scientific studies.</p> <p>D6- Use information technology to manage information, access on-line medical researches to support his/her own education.</p>
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4- Course Contents

Topic	Lecture hours/week	Practical/Clinical hours/week	Total No. of hours hours/week
Pharmacokinetic variables	3	-	3
Drug interactions and adverse drug reactions	2	-	2
Drugs affecting calcium homeostasis	1	-	1
Corticosteroids	1	-	1
Nonsteroidal anti-inflammatory drugs	2	-	2
Opioid drugs	2	-	2
Sedative hypnotic drugs	1	-	1
Chemotherapy	6	-	6
Skeletal muscle relaxants	1	-	1
Treatment of Shock	1	-	1
Total	20		20

5-Teaching and Learning Methods	1-Lectures & discussions. 2-Assignments 3-Attending and participating in scientific conferences and workshops to acquire the general and transferable skills needed
6-Teaching and Learning Methods for students with limited Capacity	Additional lectures, adjusting time and place of lectures according to their schedule and capacity
7- Student Assessment	
A-Student Assessment Methods	1- Written exam to assess the capability of the student for assimilation and application of the knowledge included in the course. 2-Oral exam to assess the student intellectual and communication skills regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the % of achievement of the intended learning outcomes of the course.
B-Assessment Schedule (Timing of Each Method of Assessment)	<i>Assessment 1: one written exam by the end of the course</i> <i>Assessment 2: Oral exam, after the written exam</i>

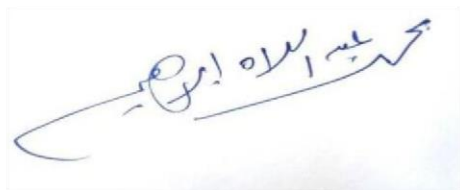
	Formative only assessment: log book.		
8-Weighting of Each Method of Assessment	Written examination:	12 marks	40%
	Oral and practical examination:	18 marks	60%
	Total:	30 marks	100%
9- List of References			
A. Course Notes/handouts	Lecture notes prepared by the staff members in the department.		
B. Essential Books	- Principles of pharmacology the pathophysiologic basis of drug therapy		
C. Recommended Text Books	- Goodman & Gilman - Katzung		
D. Periodicals, websites	Pharmacological Reviews - Journal of Pharmacology and Experimental therapeutics - British journal of pharmacology - European journal of pharmacology - Pharmacological research http://www.ncbi.nlm.nih.gov/pubmed/		

Course Coordinator/s:

Ass. Prof. Dr. Seham Abdelwakeel

Head of Department:

Professor Dr. Mohamed Abdellah Ibrahim



Date of last update & approval by department Council:

1 / 2023

مسمى المقرر	جزء اول ماجستير العظام
كود المقرر	

جامعة/أكاديمية : .. الحزب
 كلية / معهد
 الطب
 قسم : الفارماكولوجي

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
Pharmacokinetic variables	1,2	+	+		
Drug interactions and adverse drug reactions	3	+	+	+	
Drugs affecting calcium homeostasis	4	+	+	+	+

Corticosteroids	5	+	+	+	
Nonsteroidal anti-inflammatory drugs	6	+	+		
Opioid drugs	7	+	+	+	
Sedative hypnotic drugs	8	+	+	+	
Chemotherapy	9,10,11	+	+	+	+
Skeletal muscle relaxants	12	+	+	+	+
Treatment of Shock	13	+	+	+	+

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				
Presentation/seminar	X	X	X	
Journal club				
Thesis discussion				
Training courses & workshops		X	X	X
Other/s (Specify)				

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

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

Blueprint of Orthopedics MSC (Pharmacology Examination Paper)

12 Mark

	Topics	H O U R S	Knowledge %	Intellectual %	% of topics	Mark	Actual mark
1	Pharmacokinetic variables	3	100	0	15	1.8	2
2	Drug interactions and adverse drug reactions	2	70	30	10	1.2	1
3	Drugs affecting calcium homeostasis	1	70	30	5	0.6	1
4	Corticosteroids	1	80	20	5	0.6	0.5
5	Nonsteroidal antiinflammatory drugs	2	70	30	10	1.2	1
6	Opioid drugs	2	70	30	10	1.2	1.5
7	Sedative hypnotic drugs	1	80	20	5	0.6	0.5
8	Chemotherapy	6	60	40	30	3.6	3.5
9	Skeletal muscle relaxants	1	100	0	5	0.6	0.5
10	Treatment of Shock	1	75	25	5	0.6	0.5
	Total	20			100%		12



جامعة المنيا
كلية : الطب البشري
قسم: الفسيولوجيا الطبية

Medical Physiology Course Specifications For 1st Part Master (MSc) Degree in ORTHOPEDICS

University: Minia

Faculty: Medicine

Faculty offering the program: Faculty of Medicine.

Department offering the course: Medical Physiology Department.

Program(s), on which the course is given: MSc Degree in Orthopedics.

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

Academic year/level: 1st part MSc degree in Orthopedics.

Date of specification approval: 2022-2023

Basic Information

Title: Physiology course specifications for 1st part MSc degree of Orthopedics

Code: OT200

Credit Hours: Not applicable

Lectures: 1.5 hours / week

Tutorial/Practical: Not applicable

Professional information

1) OVERALL AIM OF COURSE:

The aim of the course is to provide the postgraduate students with knowledge about the physiological principles underlying Orthopedics diseases that aid in interpretation of symptoms, investigations and management.

INTENDED LEARNING OUTCOMES OF COURSE (ILOS)

A. Knowledge and Understanding:

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

A1. Discuss the Physiology of Hematological System (Blood):

1.1. General constituents of blood & their functions.

1.2. Clinical conditions resulting from abnormalities of blood components.

A2. Explain the Physiology of Autonomic Nervous System (ANS):

2.1. Distribution & functions of sympathetic and parasympathetic.

2.2. Chemical transmission in ANS.

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

3.1. Pain sensation; types, mechanism, body reactions and control mechanisms.

3.2. Upper versus Lower Motor Neuron Lesions.

A4. Identify the Physiological basis of Respiratory System:

4.1. Control of respiration, hypoxia and cyanosis.

A5. Describe the Physiological basis of Cardiovascular System (CVS):

5.1. Arterial blood pressure (ABP); Hemorrhage & Shock

A6. Discuss in details the following special topics (Endocrine System):

6.1. Mechanism & hormonal control of bone formation, growth, remodeling.

6.2. Endocrinal disorders affecting bone.

6.3. Calcium homeostasis & disorders.

6.4. Glucose homeostasis & disorders.

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 Orthopedics 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 Orthopedics.

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:

<u>Topic:</u>	No. of Lectures	Total no. of hours
<u>A1. Physiology of Blood:</u> <ul style="list-style-type: none">• General constituents of blood & their functions.• Clinical conditions resulting from abnormalities of blood components.	2	3
<u>A2 Physiology of Autonomic Nervous System (ANS):</u> <ul style="list-style-type: none">• Distribution & functions of sympathetic and parasympathetic.• Chemical transmission in ANS.	3	4.5
<u>A3. Physiology of Central Nervous System (CNS):</u> <ul style="list-style-type: none">• Pain sensation; types, mechanism, body reactions & control.• Upper versus Lower Motor Neuron Lesions.	6	9
<u>A4. Physiological basis of Respiratory System:</u> <ul style="list-style-type: none">• Control of respiration, hypoxia and cyanosis.	2	3
<u>A5. Physiological basis of Cardiovascular System (CVS):</u> <ul style="list-style-type: none">• Arterial blood pressure (ABP); Hemorrhage & Shock	2	3
<u>A6. Endocrine System (Special topics):</u> <ul style="list-style-type: none">• Mechanism & hormonal control of bone formation, growth, remodelling.• Endocrinal disorders affecting bone.• Calcium homeostasis & disorders.• Glucose homeostasis & disorders.	9	13.5
Total	24	36

TEACHING AND LEARNING METHODS:

1. Lectures (1.5hr/wk.) throughout the academic year interchangeable with recorded lectures.
2. Self-learning activities such as use of internet and multimedia.

STUDENT ASSESSMENT METHODS:

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

Assessment Schedule:

- **Assessment 1:** Final written exam.
- **Assessment 2:** Final oral exam.

Weighting of assessment:

- **Final written exam** 12 marks (40%)
- **Final oral exam** 18 marks (60%)
- **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.

Last updated and approved by department council 3 / 2023

Course Coordinator,

Dr. Dr. Abdelaleem Abdelnour

Head of Department,

Prof. Dr. Merhan Mamdouh Ragy

Prof. & Head of Medical Physiology Department
Faculty of Medicine, Minia University



جامعة المنيا
كلية : الطب البشري
قسم: الفسيولوجيا الطبية

Physiology course specifications for 1st Part MSc degree in Orthopedics	مسمى المقرر
OT200	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 2.2	A 3.1	A 3.2	A 4.1	A 5.1	A 6.1	A 6.2	A 6.3	A 6.4	B 1	B 2	D 1	D 2	D 3
1. Physiology of Blood	X	X											X	X	X	X	X
2. Autonomic Nervous System			X	X									X	X	X	X	X
3. Central Nervous System					X	X							X	X	X	X	X
4. Respiratory System							X						X	X	X	X	X
5. Cardiovascular System								X					X	X	X	X	X
6. Endocrine System									X	X	X	X	X	X	X	X	X

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

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

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

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

Last updated and approved by department council 3 / 2023

**Course Coordinator,
Dr. Dr. Abdelaleem Abdelnour**

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

**Blueprint of Postgraduate Physiology Course for Master's degree (1st part) of
ORTHOPEDICS Department (Code: OT 200) (6 marks)**

Topic	Hours	Knowledge %	Intellectual %	Weight %	ILOs	Actual mark	Modified mark
1. <u>Physiology of Hematological System (Blood):</u> General constituents of blood and their functions. RBCs, Erythropoiesis and its clinical disorders. Blood groups and principles of blood transfusion. WBCs and Immune response. Mechanisms of Hemostasis and its clinical disorders	3	75	25	8.33	A1	1.8	2
2. <u>Physiology of autonomic nervous system:</u> Distribution and functions of sympathetic NS. Distribution and functions of sympathetic NS. Chemical transmitters and receptors.	4.5	75	25	12.5	A2	1.8	2
3. <u>Physiology of central nervous system (CNS):</u> Pain sensation; types, mechanism, body reactions and control mechanisms, Upper versus Lower Motor Neuron Lesions.	9	75	25	25	A3	1.8	2
4. <u>Physiological basis of Respiratory system:</u> Control of respiration, hypoxia and cyanosis starvation and their effects on the body.	3	75	25	8.33	A4	0.98	1
5. <u>Physiological basis of Cardiovascular System (CVS):</u> Arterial blood pressure (ABP), Hemorrhage & Shock	3	75	25	8.33	A5	0.98	1
6. <u>Physiological basis of Endocrinal System:</u> Mechanism & hormonal control of bone formation, growth, remodeling, Endocrinal disorders affecting bone, Calcium homeostasis & disorders, Glucose homeostasis & disorders.	13.5	75	25	37.5	A6	3.8	4
Total	36			100%	-	12	12

Last updated and approved by department council 3 / 2023

**Course Coordinator,
Dr. Dr. Abdelaleem Abdelnour**

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

Course Specification of Medical Ethics Master degree of **all clinical** (2022-2023)

University: Minia

Faculty: Medicine

Program on which the course is given: Master degree of **all clinical**

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

Department offering the program: **all clinical** Department

Department offering the course: Forensic Medicine & Clinical Toxicology
Department

Academic year / Level: First part

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

A. Basic Information		
<ul style="list-style-type: none">• Academic Year/level: Post graduate; 1st Part MSC, all clinical	<ul style="list-style-type: none">• Course Title: Course Specification of Medical Ethics (Master degree of all clinical)	<ul style="list-style-type: none">• Code:
<ul style="list-style-type: none">• Number of teaching hours:<ul style="list-style-type: none">- Lectures: Total of 30 hours; 3 hour/week- Practical: Total of 15 hours; 1 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): <i>Upon completion of the course, the student should be able to:</i>		
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	

	<p>patients, their families, community and medical staff in an ethical, legal and human manner.</p> <p>A.5- Identify rules in law and regulations to deal with patients in practicing medicine.</p> <p>A.6- Explain the standard and accredited methods of clinical research especially on human beings.</p>
B- Intellectual Skills	<p>B.1- Design approach to patients in different situations; critical and noncritical ones.</p> <p>B.2- Develop adequate communication skills with patients, community and colleagues.</p> <p>B.3- Conclude in medical researches on clear ethical basis.</p> <p>B.4- Use knowledge and learn according to standard basis worldwide.</p> <p>B.5- Apply and practice medicine according to concepts of evidence based medicine.</p> <p>B.6- Recognize common ethical dilemma and suggest a proper solution.</p>
C- Professional and Practical Skills	<p>C.1- Use a high professional approach with colleagues and patients.</p> <p>C.2- Modify steps of upgrading his/her educational, academic and clinical carriers.</p> <p>C.3- Use the standard guidelines in managing patients.</p> <p>C.4- Identify what is called as clinical governance and auditing his /her Performance.</p>
D- General and transferable Skills	<p>D.1- Identify how to respect his/herself and the profession.</p> <p>D.2- Develop adequate behavior and skill communications with community.</p> <p>D.3- Modify life and live like others sharing social and national affairs.</p> <p>D.4- Develop the capacity of helping people and share in upgrading their culture and education.</p> <p>D.5- Identify how to participate in the national and social affairs and responsibilities.</p>

3- Course Contents

		Lecture	Practical	Total
4- Teaching and Learning Methods	4.1 - Straight lectures; power point presentations			
	4.2 - Practical lessons			
	4.3 - Brain storming with the students			
	Duties 4.4 of Questions and Answers 1			3
5- Teaching and Learning Methods to students with limited Capacity	(Not applicable)			
		2	1	3
6- Student Assessment				
Diagnosis of death & Death Certificates		2	1	3
Consent in medical field		2	1	3
Medical malpractice		2	1	3
Medical syndicate		2	1	3
Professional secrecy		2	1	3
Physician disciplinary proceeding		2	1	3
Domestic Violence		2	1	3
Euthanasia (Mercy death)		2	1	3
Ethics in medical research		2	1	3
Medical reports		2	1	3
Rules of using addictive drugs among physicians		2	1	3
Medical certificates		2	1	3
Total		(30 hr.) ۲/W	(15 hr.) 1/W	(45 hr.) 3/W

A. Student Assessment Methods	<p><u>TENDANCE CRITERIA:</u> by Faculty laws (log book)</p> <p><u>ASSESSMENT TOOLS:</u></p> <p>*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. *Practical exam: to assess practical and professional skills.</p>						
B. Assessment Schedule	<ul style="list-style-type: none"> Final Written exam week: 24-28 Oral exam week: 24-28 Practical exam week: 24-28 						
C. Weighting of Assessment	<table> <tr> <td>Final Written exam</td><td>40% (40 Marks)</td></tr> <tr> <td>Oral & Practical exams</td><td>60% (60 Marks)</td></tr> <tr> <td>Total</td><td>100% (100 Marks)</td></tr> </table>	Final Written exam	40% (40 Marks)	Oral & Practical exams	60% (60 Marks)	Total	100% (100 Marks)
Final Written exam	40% (40 Marks)						
Oral & Practical exams	60% (60 Marks)						
Total	100% (100 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 Coordinators:

Prof. Dr. Morid Malak Hanna

Dr. Mennatallah Mahmoud Ahmed

Head of Department:

Prof. Dr. Irene Atef Fawzy

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

Course Specification of Medical Ethics	مسمى المقرر
Master degree of all clinical (First part))	
	كود المقرر

جامعة/أكاديمية : المنيا.....

كلية / معهد : الطب البشرى.....

قسم : الطب الشرعى والسموم

الأكلينكية.....

A. The Matrix of Coverage of Course IL by Contents

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

Rules of using addictive drugs among physicians	A1,4	B1,2	-	-
Medical certificates	A1,6	B3,5	C3	D1,4

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

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

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

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



Blueprint of Forensic Medicine and Clinical Toxicology Department



Blueprint of 1st master of **all clinical specialties** 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	13.32	1	1	5.32	1	10	5.32	5
2	Medicolegal aspect of cloning	2	75	25	6.66	1	1	2.66	---	---	2.66	3
3	Diagnosis of death & Death Certificates	2	75	25	6.66	1	1	2.66	---	---	2.66	3
4	Consent in medical field & Medical malpractice	4	70	30	13.32	1	1	5.32	1	10	5.32	5
5	Medical syndicate & Professional secrecy	4	75	25	13.32	1	1	5.32	---	---	5.32	5
6	Physician disciplinary proceeding & Euthanasia (Mercy death)	4	75	25	13.32	1	1	5.32	1	10	5.32	5

7	Domestic Violence	2	70	30	6.66	1	1	2.66	---	---	2.66	3
8	Ethics in medical research	2	80	20	6.66	1	1	2.66	---	---	2.66	3
9	Medical reports & Medical certificates	4	80	20	13.32	1	1	5.42	1	10	5.42	5
10	Rules of using addictive drugs among physicians	2	75	25	6.76	1	1	2.66	---	---	2.66	3
	Total	30			100%			40		40	40	40

Course Specification of General Surgery in Master degree in Orthopedic surgery

Course (6): General surgery



University.....Minia FacultyMedicine

1. Program on which the course is given: Master degree in orthopedic surgery
2. Major or minor element of program: Minor
3. Department offering the program: orthopedic surgery
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 family medicine

Lecture	Tutorial:	practical	Total
16	-	14	30

OS200

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 orthopedic surgery cases that are related to the General Surgery practice.
- a.2- Understand the various diagnostic and laboratory techniques necessary to establish diagnosis of various general surgical conditions related to orthopedic surgery.
- a.3- understand the atlas score in polytrauma patients
- a.4- understand the important emergent general surgery cases.
- a.5- understand the basics of blood transfusion
- a.6- understand brief surgical anatomy of the common surgical procedures
- a.7- discuss the principles and practice of preoperative preparation and postoperative care.

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 orthopedics.
- b.2 Link between knowledge of General Surgery and orthopedics for Professional problems' solving.
- b.3 ability to manage polytrauma cases with ATLAS score
- b.4 manage and communicate with different surgical problems related to orthopedic surgery.
- b-5, electrolyte imbalance and shock management
- b-6 manage primary health issues that are related to general surgery

Professional and Practical Skills:

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

- C1. Assess surgical problems, different options to deal with & Apply the principles of diagnosis, treatment, control of surgical diseases in different specialties
- C.2- Perform physical examination of patients for General Surgery diseases.
- C.3 perform basic surgical skills.
- c-4- deal with emergent cases in different surgical specialties
- c-5 diagnose and time of referral for different common general surgery pathologies.

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-** conduct sincere and effective patient interviews, properly explain the

condition and plan of management, obtain consent and convey bad news in a professional way.

d.3- communicate, consult and respect the role of other health care providers.

d.4- communicate with health authorities through different meetings and conferences national and international.

3. Contents:

Topic	No. of hours	lectures	Clinical Hrs
Parathyroid and Ca metabolism	2	1	
Adrenal gland	2	1	
Surgically correctable hypertension	2	1	
Limb ischemia	4	2	2
Vascular trauma	4	2	2
Management of multiple trauma patient	4	2	2
Abdominal trauma and fracture pelvis	4	2	2
Head trauma	3	2	2
Maxillofacial trauma	2	1	2
Chest trauma	3	2	2
Total	30	16	14

1. CLINICAL (26 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.

-sharing and perform basic surgical procedures.

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

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

4- Teaching and Learning Methods:

4.1- Lectures with power point presentations and discussions.

4.2: Interactive bedside teaching with clinical case presentations of difficult and interesting cases and group discussions

4.3: Problem solving case scenarios (commentary) .

4.4:Seminars and presentation of an essay by the postgraduate students.

4.5. Workshops and training courses for procedural skills.

4.6. Attendance of activities in the department including thesis discussion, conferences , clinical rounds, outpatient clinics , procedures ...with both senior staff and junior staff.

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 30 degree

Clinical Examination 22.5 degree

Oral Examination 22.5 degree

Other types of assessment 0 %

Total 75 degrees

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.
- Library for the department.

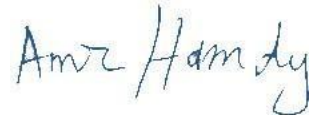
Course Coordinator:

DR/ Yasser Ali

Hamdy

Head of Department:

Prof Dr / Amr



Date:

Date of last update & approval by department Council:

5/3 / 2023



مسمى المقرر	جزء اول ماجستير طب الاسرة
كود المقرر	OT 200

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

A. Matrix of Coverage of Course ILOs By Contents

Contents List of course) (topics	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectu al Skills	C. Profession al & Practical skills	D. General & Transfera ble Skills
	A	B	C	D
Parathyroid and Ca metabolism	-a1-a2-a3-a4-a5	-b1-b2-b3-b4	-c1-c2-c4	-d1-d4
Adrenal gland	-a1-a2-a3-a4-a5	-b1-b2-b3-b4	-c3-c4	-d1-d4
Surgically correctable hypertension	-a1-a2-a3-a4-a5	-b1-b2-b3-b4	-c1-c2-c4	-d1-d4
Limb ischemia	-a1-a2-a3--a5	-b1-b2-b4	C1-c3-c4-	-d1-d4
Vascular trauma	-a1-a2-a3-a6	-b1-b4	-c1-c4	-d1-d2-d4
Management of multiple trauma patient	-a1-a2-a3-a4-a5	-b1-b2-b3-b4	-c1-c2-c4	-d1-d4
Abdominal trauma and fracture pelvis	-a1-a2-a3-a4-a5	-b1-b2-b3-b4	-c1-c2-c4	-d1-d4
Head trauma	-a1-a2-a3-a4-a5	-b1-b2-b3-b4	-c1-c2-c4	-d1-d4
Maxillofacial trauma	-a1-a2-a3-a4-a5	-b1-b2-b3-b4	-c1-c2-c4	-d1-d4
Chest trauma	-a1-a2-a3-a4-a5	-b1-b2-b3-b4	-c1-c2-c4	-d1-d4

-MCs Neurosurgery 9

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

Methods of Teaching Learning &	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understand ing	B. Intellect ual Skills	C. Professio nal & 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)				



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 family medicine master degree

Topic	No. of lectures' contact hours	% of topic	Final exam Marks	Modified marks
1- Parathyroid and Ca metabolism	2	6.66	1.3	2
2- Adrenal gland	2	6.66	1.3	2.5
3- Surgically correctable hypertension	2	6.66	0.6	1.5
4- Limb ischemia	4	13.34	0.6	1.5
5- Vascular trauma	4	13.34	1.3	2
6- Management of multiple trauma patient	4	13.34	1.3	1.5
7- Abdominal trauma and fracture pelvis	4	13.34	1.3	2.5
8- Head trauma	3	10	0.6	1.5
9- Maxillofacial trauma	2	6.66	0.6	2
10- Chest trauma	3	10	1.3	2.5
Total	30	100%	20	30

Course Specifications of orthopaedics

University: Minia

Faculty: Medicine

Department: Orthopaedics and Traumatology

• Course Information		
• Academic Year/level: 2022	• Course Title: course specifications of orthopedics in Master degree of orthopedic surgery and traumatology	• Code: OT200
• Number of teaching hours: - Didactic 432, (40%) practical 648 (60%).total 1080		
Overall Aims of the course	By the end of the course the student must be able to: 1.1. To enable candidates to keep with international update standards of most of the commonly seen problems of Orthopaedics by mastering high level of clinical skills. 2.1. To enable candidate to update medical knowledge as well as clinical experience and competence in the area of common, infrequent, and rare disorders. 3.1. Provide candidate with fundamental updated details knowledge of emergencies 4.1. To enable them to have professional careers as a specialists in Egypt 6.1. To enable candidate effectively use diagnostic	

	<p>tools of recent studies.</p> <p>7.1. To enable candidate to effectively use available technologies to improve his practice.</p> <p>8.1. To enable candidate to deal effectively with common and infrequent emergencies.</p> <p>9.1. To enable the candidates of making appropriate referrals to a sub-specialist for consultation or intervention.</p> <p>10.1. To enable them to continue self-learning in subspecialties.</p>
<p>Intended learning outcomes of course (ILOs): <i>Upon completion of the course, the student should be able to:</i></p>	
<p>A- Knowledge and Understanding</p>	<p>A1. Demonstrate in-depth knowledge and understanding of theories, basics and updated biomedical, clinical epidemiological and socio – behavioral science relevant to his specialty as well as the evidence – based application of this knowledge to patient care.</p> <p>A2. Explain basics, methodology, tools and ethics of scientific medical, clinical research.</p> <p>A3. Mention ethical, medico logical principles and by laws relevant to his practice in the field of Orthopaedics.</p> <p>A4. Mention principles measurements of quality assurance and quality improvement in medical education and in clinical practice of Orthopaedics.</p> <p>A5. Mention health care system, public health and health policy, issues relevant to this specialty and principles and methods of system – based improvement of patient care in common health problems of the field of Orthopaedics.</p>
<p>B- Intellectual Skills</p>	<p>B1. Correlate the basic and clinically supportive sciences which are appropriate to the specialty related conditions / problem / topics.</p> <p>B2. Apply investigatory and analytic thinking “problem – solving “approaches to clinical situation related to Orthopaedics.</p> <p>B3. Plan research project.</p> <p>B4. Interpret scientific papers.</p> <p>B5. Relate clinical risk management with different situations</p>

	<p>in the field of Orthopaedics.</p> <p>B6. Plan for quality improvement in the field of medical education and clinical practice in Orthopaedics.</p> <p>B7. Formulate management plans and alternative decisions in different situations in the field of Orthopaedics.</p> <p>B8. Create / innovate plans, systems, and other issues for improvement of performance in his practice.</p> <p>B9. Interpret scientific data in front of a panel of experts.</p>
<p>C- Professional and Practical Skills</p>	<p>C.1. Perform extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.</p> <p>C.2 Practice extensive level of patient care for patients with all common diagnoses and for uncomplicated procedures related to Orthopaedics.</p> <p>C.3. Perform extensive level of patient care for non- routine, complicated patients and under increasingly difficult circumstances, while demonstrating compassionate, appropriate and effective care.</p> <p>C.4. Gather essential and accurate information about patients of the Orthopaedics related conditions and reporting these data effectively.</p> <p>C.5. Perform diagnostic and therapeutic procedures considered essential in the field of Orthopaedics.</p> <p>C.6. Handles unexpected complications, while demonstrating compassion and sensitivity to patient needs and concerns</p> <p>C.7. Decide diagnostic and therapeutic interventions based on patient information and preferences, up- to-date scientific evidence and clinical judgment for the Orthopaedics related conditions.</p> <p>C.8. Communicate effectively and demonstrate caring and respectful behaviours when interacting with patients and their families in the Orthopaedics related situations</p>

D- General and transferable Skills	D1. Master interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals, including: - •Present a case. •Write a consultation note. •Inform patients of a diagnosis and therapeutic plan completing and maintaining comprehensive. •Timely and legible medical records. •Teamwork skills		
	D.2. Use information technology to manage information		
	D.3. Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.		
	D.4. Continuously improves patient care based on constant self-evaluation and life-long learning.		
	D.5. Work effectively in health care delivery settings and systems related to Orthopaedics including good administrative and time management.		
	D.6. Work effectively with others as a member or leader		
Course Contents : Total of 72 weeks			
Topic	Total no. of hours/week	Practical/ Clinical hours/week	Total No. of Lectures hours/week
<u>B-Orthopedic course:</u> • Biomechanics and biomaterials • Orthopedic oncology • Arthroplasty • Spine disorders • Shoulder, Elbow and Hand disorders • Knee, Foot and Ankle disorders • Pediatric orthopedic disorders	15	9	6
Total	1080	648	432
• Teaching and Learning Methods	1 Lectures. 2 Practical / clinical lessons 3 Discussion sessions. 4 Information collection from different sources. 5 Attending and participating in scientific meeting and workshops 6 Attendance local and international		

	courses, workshops and training courses.										
Teaching and Learning Methods for students with limited Capacity											
<ul style="list-style-type: none"> Student Assessment 											
A. Student Assessment	<p><i>1 Student assignments: to assess general transferable skills and intellectual skills.</i></p> <p><i>2 Written examination: to assess knowledge.</i></p> <p><i>3 Clinical examination: to assess practical and intellectual skills.</i></p> <p><i>4 Oral examination: to assess knowledge.</i></p>										
B. Student Assessment methods	<p><i>Assessment 1 ... Assignment(log book)</i></p> <p><i>Assessment 2 ... Written exam...</i></p> <p><i>Assessment 3.... Clinical exam & OSCE</i></p> <p><i>Assessment 4.... Oral exam.....</i></p>										
C. Assessment Schedule (Timing of Each Method of Assessment)	At the end of the course										
D. Weighting of Each Method of Assessment	<table> <tr> <td>Written Examination</td><td>140 marks</td></tr> <tr> <td>Clinical Examination</td><td>105 marks</td></tr> <tr> <td>Oral Examination</td><td>105 marks</td></tr> <tr> <td colspan="2">-----</td></tr> <tr> <td>Total</td><td>350 marks</td></tr> </table>	Written Examination	140 marks	Clinical Examination	105 marks	Oral Examination	105 marks	-----		Total	350 marks
Written Examination	140 marks										
Clinical Examination	105 marks										
Oral Examination	105 marks										

Total	350 marks										
<ul style="list-style-type: none"> List of References 											
<ul style="list-style-type: none"> Course Notes/handouts 	Lectures notes prepared by staff members in the department.										
<ul style="list-style-type: none"> Essential Books 	Solomon, Louis, David Warwick, and Selvadurai Nayagam, eds. <i>Apley's system of orthopaedics and fractures</i> . CRC press, 2010.										
<ul style="list-style-type: none"> Recommended Text Books 	Azar, Frederick M., S. Terry Canale, and James H. Beaty. <i>Campbell's</i>										

	<i>Operative Orthopaedics, E-Book.</i> Elsevier Health Sciences, 2020..
<ul style="list-style-type: none"> • Periodicals, websites 	International Journal of orthopaedics and traumatology American Journal of orthopaedics and traumatology

Course Coordinator/s:

Prof.Dr.

Ahmed Fathy Sadek

Head of Department:

Prof. Dr. Ahmed Omar Youssef

Professor of orthopaedics & traumatology, Faculty of medicine –
Minia university

Date of last update & approval by department Council: 3/6/2020

Date of last revision & approval by department Council: 7/3/2023

Head of Department:

Prof. Dr. Ahmed Omar Youssef

Professor of orthopaedics & traumatology, Faculty of medicine –
Minia university

نموذج رقم (١١ أ)

جامعة/أكاديمية :

كلية / معهد :

قسم :جراحة العظام والاصابات.....

A. Matrix of Coverage of Course ILOs By Contents

9- Course Specification of Surgical orthopaedics Master degree in orthopaedics and traumatology	مسمى المقرر : كاديمية : عهدجراحة العظام والاصابات.....			
OT 200	كود المقرر	A. Matrix of Coverage of Course ILOs By Contents			
Contents (List of course topics)	Intended Learning Outcomes (ILOs)				
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills	
	A	B	C	D	
Biomechanics and biomaterials	A1, A2, A3, A4,A5, A6				
Orthopedic oncology	A3	B3, B4	C3	D1, D5	
Arthroplasty	A1,A2,A5	B1 ,B4	C1, C2, C4	D1,D2,D5	
Spine disorders	A1,A2,A3,A4,A5	B1,B2,B3	C1,C2,C4,C5	D1,D2,D3	

Shoulder, Elbow and Hand disorders	A1,A2,A3,A4	B2,B3,B4	C1,C4,C5	D1,D3
Knee, Foot and Ankle disorders	A1,A2,A3,A4	B2,B3,B4	C1,C4,C5	D1,D3
Pediatric orthopedic disorders	A1,A2,A3,A4	B2,B3,B4	C1,C4,C5	D1,D3

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

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

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

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

Blueprint of Orthopedic Surgery ” Examination Paper”

“140 Marks”

	Topic	Knowledge%	Intellectual%	% topic	Actual mark
1	Biomechanics and biomaterials	75%	25%	14.2%	20
2	Orthopedic oncology	67%	33%	14.2%	20
3	Arthroplasty	67%	33%	14.2%	20
4	Spine disorders	67%	33%	14.2%	20
5	Shoulder, Elbow and Hand disorders	67%	33%	14.2%	20
6	Knee, Foot and Ankle disorders	67%	33%	14.2%	20
7	Pediatric orthopedic disorders	67%	25%	14.2%	20
	Total			100%	125

Course Specifications of traumatology

University: Minia

Faculty: Medicine

Department: Orthopaedics and Traumatology

• Course Information		
• Academic Year/level: 2022	• Course Title: course specifications of Traumatology in Master degree of orthopedic surgery and traumatology	• Code: OT200
• Number of teaching hours: - Didactic 144, (33%) practical 288 (67%).total 432		
Overall Aims of the course	By the end of the course the student must be able to: 1.1. To enable candidates to keep with international update standards of most of the commonly seen problems of traumatology by mastering high level of clinical skills. 2.1. To enable candidate to update medical knowledge as well as clinical experience and competence in the area of common, infrequent, and rare disorders. 3.1. Provide candidate with fundamental updated details knowledge of emergencies 4.1. To enable them to have professional careers as a specialists in Egypt 6.1. To enable candidate effectively use diagnostic tools of recent studies. 7.1. To enable candidate to effectively use available technologies to improve his practice. 8.1. To enable candidate to deal effectively with	

	<p>common and infrequent emergencies.</p> <p>9.1. To enable the candidates of making appropriate referrals to a sub-specialist for consultation or intervention.</p> <p>10.1. To enable them to continue self-learning in subspecialties.</p>
<p>Intended learning outcomes of course (ILOs): <i>Upon completion of the course, the student should be able to:</i></p>	
<p>A- Knowledge and Understanding</p>	<p>A1. Demonstrate in-depth knowledge and understanding of theories, basics and updated biomedical, clinical epidemiological and socio – behavioral science relevant to his specialty as well as the evidence – based application of this knowledge to patient care.</p> <p>A2. Explain basics, methodology, tools and ethics of scientific medical, clinical research.</p> <p>A3. Mention ethical, medico logical principles and by laws relevant to his practice in the field of Traumatology.</p> <p>A4. Mention principles measurements of quality assurance and quality improvement in medical education and in clinical practice of Traumatology.</p> <p>A5. Mention health care system, public health and health policy, issues relevant to this specialty and principles and methods of system – based improvement of patient care in common health problems of the field of Traumatology</p>
<p>B- Intellectual Skills</p>	<p>B1. Correlate the basic and clinically supportive sciences which are appropriate to the specialty related conditions / problem / topics.</p> <p>B2. Apply investigatory and analytic thinking “problem – solving “approaches to clinical situation related to Traumatology.</p> <p>B3. Plan research project.</p> <p>B4. Interpret scientific papers.</p> <p>B5. Relate clinical risk management with different situations in the field of Traumatology.</p>

	<p>B6. Plan for quality improvement in the field of medical education and clinical practice in Traumatology.</p> <p>B7. Formulate management plans and alternative decisions in different situations in the field of Traumatology.</p> <p>B8. Create / innovate plans, systems, and other issues for improvement of performance in his practice.</p> <p>B9. Interpret scientific data in front of a panel of experts.</p>
<p>C- Professional and Practical Skills</p>	<p>C.1. Perform extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.</p> <p>C.2 Practice extensive level of patient care for patients with all common diagnoses and for uncomplicated procedures related to Traumatology.</p> <p>C.3. Perform extensive level of patient care for non- routine, complicated patients and under increasingly difficult circumstances, while demonstrating compassionate, appropriate and effective care.</p> <p>C.4. Gather essential and accurate information about patients of the Traumatology related conditions and reporting these data effectively.</p> <p>C.5. Perform diagnostic and therapeutic procedures considered essential in the field of Traumatology.</p> <p>C.6. Handles unexpected complications, while demonstrating compassion and sensitivity to patient needs and concerns</p> <p>C.7. Decide diagnostic and therapeutic interventions based on patient information and preferences, up- to-date scientific evidence and clinical judgment for the Traumatology related conditions.</p> <p>C.8. Communicate effectively and demonstrate caring and respectful behaviours when interacting with patients and their families in the Traumatology related situations</p>

D- General and transferable Skills	D1. Master interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals, including: - •Present a case. •Write a consultation note. •Inform patients of a diagnosis and therapeutic plan completing and maintaining comprehensive. •Timely and legible medical records. •Teamwork skills		
	D.2. Use information technology to manage information		
	D.3. Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.		
	D.4. Continuously improves patient care based on constant self-evaluation and life-long learning.		
	D.5. Work effectively in health care delivery settings and systems related to Traumatology including good administrative and time management.		
	D.6. Work effectively with others as a member or leader		
Course Contents : Total of 72 weeks			
Topic	Total no. of hours/week	Practical/ Clinical hours/week	Total No. of Lectures hours/week
<u>A-trauma course:</u> <ul style="list-style-type: none">Principles of fractures and fracture managementUpper limb injuriesLower limb InjuriesSpine TraumaPelvic TraumaMajor injuries and poly traumatized patients.	6	4	2
Total	432	288	144
<ul style="list-style-type: none">Teaching and Learning Methods	1 Lectures. 2 Practical / clinical lessons 3 Discussion sessions. 4 Information collection from different sources. 5 Attending and participating in scientific meeting and workshops 6 Attendance local and international courses, workshops and training courses.		

Teaching and Learning Methods for students with limited Capacity											
<ul style="list-style-type: none"> Student Assessment 											
A. Student Assessment	<p>1 Student assignments: to assess general transferable skills and intellectual skills.</p> <p>2 Written examination: to assess knowledge.</p> <p>3 Clinical examination: to assess practical and intellectual skills.</p> <p>4 Oral examination: to assess knowledge.</p>										
B. Student Assessment methods	<p>Assessment 1 ... Assignment(log book)</p> <p>Assessment 2 ... Written exam...</p> <p>Assessment 3.... Clinical exam & OSCE</p> <p>Assessment 4.... Oral exam.....</p>										
C. Assessment Schedule (Timing of Each Method of Assessment)	At the end of the course										
D. Weighting of Each Method of Assessment	<table> <tr> <td>Written Examination</td><td>140 marks</td></tr> <tr> <td>Clinical Examination</td><td>105 marks</td></tr> <tr> <td>Oral Examination</td><td>105 marks</td></tr> <tr> <td colspan="2">-----</td></tr> <tr> <td>Total</td><td>350 marks</td></tr> </table>	Written Examination	140 marks	Clinical Examination	105 marks	Oral Examination	105 marks	-----		Total	350 marks
Written Examination	140 marks										
Clinical Examination	105 marks										
Oral Examination	105 marks										

Total	350 marks										
<ul style="list-style-type: none"> List of References 											
<ul style="list-style-type: none"> Course Notes/handouts 	Lectures notes prepared by staff members in the department.										
<ul style="list-style-type: none"> Essential Books 	Solomon, Louis, David Warwick, and Selvadurai Nayagam, eds. <i>Apley's system of orthopaedics and fractures</i> . CRC press, 2010.										
<ul style="list-style-type: none"> Recommended Text Books 	Azar, Frederick M., S. Terry Canale, and James H. Beaty. <i>Campbell's Operative Orthopaedics, E-Book</i> . Elsevier Health Sciences, 2020..										
<ul style="list-style-type: none"> Periodicals, websites 	International Journal of orthopaedics and traumatology										

	American Journal of orthopaedics and traumatology
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Course Coordinator/s:

Prof.Dr.
Ahmed Fathy Sadek

Head of Department:

Prof. Dr. Ahmed Omar Youssef
Professor of traumatology, Faculty of medicine – Minia university

Date of last update & approval by department Council: 3/6/2020

Date of last revision & approval by department Council: 7/3/2023

Head of Department:

Prof. Dr. Ahmed Omar Youssef
Professor of traumatology, Faculty of medicine – Minia university

نموذج رقم (١١ أ)

جامعة/أكاديمية :

كلية / معهد :

قسم :جراحة العظام والاصابات.....

9- Course Specification of traumatology Master degree in orthopaedics and traumatology	مسمى المقرر
OT 200	كود المقرر

A. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Principles of fractures and fracture management	A1, A2, A4			
Upper limb injuries	A1,A2,A4,A5	B1,B2,B3,B4	C1, C2, C3, C4	D1,D2,D3,D4,D5
Lower limb Injuries	A1,A2,A4,A5	B1,B2,B3,B4	C1, C2, C3, C4	D1,D2,D3,D4,D5

Spine Trauma	A1,A2,A4,A5	B1,B2,B3,B4	C1, C2, C3, C4	D1,D2,D3,D4,D5
Pelvic Trauma	A1,A2,A3,A4,A5	B1,B2,B3,B4	C1,C2,C4,C5	D1,D2,D3
Major injuries and poly traumatized patients.	A1,A2,A3,A4,A5	B1,B2,B3,B4	C1,C2,C4,C5	D1,D2,D3

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

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

Training courses & workshops	1-2-3	1-2-3	1-2-3	1-2-3
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C. Matrix of Coverage of Course ILOs by Methods of Assessment

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

Blueprint of Traumatology ” Examination Paper”

“140 Marks”

	Topic	Knowledge%	Intellectual%	% topic	Actual mark
1	Principles of fractures and fracture management	75%	25%	14.2%	20
2	Upper limb injuries	67%	33%	14.2%	20
3	Lower limb Injuries	67%	33%	14.2%	20
4	Spine Trauma	67%	33%	14.2%	20
5	Pelvic Trauma	67%	33%	14.2%	20
6	Major injuries and poly traumatized patients.	67%	33%	28.4%	40
	Total			100%	140