



كلية الطب
Faculty of Medicine



Forensic Medicine & clinical Toxicology Department

*Master (MSc) Program &
Courses' Specifications of
Forensic Medicine & Toxicology*

نموذج رقم (١٣)

Program Specifications for MSc of Forensic Medicine & Toxicology

(2023)

Code: FT200

University: Minia University

Faculty(s): Faculty of Medicine

Department: Forensic Medicine & Clinical Toxicology

A. Basic Information:

- 1. Program title:** Master Degree in Forensic Medicine & Toxicology
- 2. Final award:** Master (MSc) in Forensic Medicine & Toxicology
- 3. Program type:** single double multiple
- 4. Responsible department:** Forensic Medicine & clinical Toxicology Department
- 5. Departments involved in the program:** Forensic Medicine & clinical, Toxicology Department and Anatomy and Embryology Department
- 6. Program duration:** 4 semester (2 years)
- 7. Number of program courses:** six
- 8. Coordinators:** Prof. Dr. Manal Abdel-Aziz and Lecturer. Mennatallah Mahmoud Ahmed
- 9. External evaluators:** Prof. Dr. Shereen Salah-eldin Galab
- 10. Program management team:**
Lecturer. Asmaa Mohammed Heshmat
Lecturer. Rana Adel Ammar
Lecturer. Mennatallah Mahmoud Ahmed
Assistant Lecturer. Radwa Abdel-Raouf
Assistant Lecturer. Alaa Abdel-Moaz
Assistant Lecturer. Aya Gamal Ramadan

B- Professional information:

1. Program aims:

Graduate of Master Degree in Forensic Medicine & Toxicology

The candidate should be able to:

The aim of this program is to provide the postgraduate with the basic medical knowledge and skills essential for the practice of forensic medicine & toxicology and necessary to gain further training and practice in this field.

1.1. Provide the postgraduate with scientific knowledge essential for the practice of forensic medicine & toxicology according to the international standards and with basic skills necessary for dealing with different medical aspects of living &

dead individuals; and proper management (diagnosis and treatment) of intoxicated patients.

1.2 Enable the postgraduates to know the ethical principles related to medical practice and allow them for active participation in community needs assessment and problems solving.

1.3. Develop the learning abilities of the candidates that necessary for continuous medical education and upgrading research interest and abilities.

2. Intended Learning Outcomes (ILOs):

(a) Knowledge and understanding:

By the end of the study of master program in forensic medicine & toxicology the candidate should be able to:

- a.1 Explain various medicolegal aspects of malpractice & ethics.
- a.2 Recognize his/her medical knowledge in the service of law with emphasis on medicolegal aspects of medical practice.
- a.3 Explain medicolegal aspects of blood grouping and DNA in forensic field.
- a.4 Explain medicolegal aspects of different cases of sexual offences.
- a.5 Explain maternal and infant morbidity and mortality from medicolegal aspects.
- a.6 Define the basics of general toxicology.
- a.7 Define the basics of systemic toxicology.
- a.8 Define the basics of specific toxicology.
- a.9 Describe different classes of common toxic substances and environmental pollution and how to eliminate toxin from body.
- a.10 Explain different groups of toxic substances and drugs and its differential diagnosis and how to do first aid measurements for each one.
- a.11 Tell scientific development in the field of forensic medicine & toxicology.
- a.12 Tell the mutual influence between professional practice and its impacts on the environment.
- a.13 Recognize the ethical and legal principles of professional practice in the field of forensic medicine.
- a.14 Explain the principles of quality in professional practice in the field of forensic medicine.
- a.15 Explain medicolegal aspects of identification of both live & dead person.
- a.16 Identify the basics and ethics of scientific research.
- a.17 Identify and recent developments in common problems related to the field of forensic medicine and clinical toxicology.

(b) Intellectual skills:

By the end of master program in forensic medicine & toxicology the candidate should be able to:

- b.1 Classify different problems of malpractices.
- b.2 Recognize different traumatic/ wound cases and how to create a report for each case and how to deal with it.
- b.3 Recognize different intoxicated patients and a treatment plan.
- b.4 Modify common ethical dilemma and suggest a proper solution.

- b.5 Interpret between knowledge for Professional problems' solving.
- b.6 Apply knowledge for professional practices in the field of forensic medicine.
- b.7 Design a research study and / or create a scientific study on a research problem.
- b.8 Plan for the development of performance in the field of forensic medicine.
- b.9 Recognize researches and issues related to forensic medicine.

Skills:

(c) Professional and practical skills:

By the end of the study of master program in forensic medicine & toxicology the candidate should be able to:

- c.1 Examine living and dead individuals.
- c.2 Classify death by different clinical and investigatory methods.
- c.3 Conclude time pass since death through assessment of Postmortem changes.
- c.4 Recognize different wounds and injuries.
- c.5 Apply a proper primary report.
- c.6 Recognize a preliminary test for blood grouping and toxicological screen.
- c.7 Modify Forensic reports.

(d) General and transferable skills:

By the end of the study of master program in forensic medicine & toxicology the candidate should be able to:

- d.1 Design database to collect material needed for research.
- d.2 Develop and working in material from various sources (including library, electronic and online resources).
- d.3 Classify working in a research assignment orally and deliver it in both written and electronic forms.
- d.4 Recognize Ethical behaviour to all patients irrespective of their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture.
- d.5 Classify management of medicolegal problems.
- d.6 Collaborate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.
- d.7 Recognize the importance of Life -long learning of the importance of life-long self-learning and show a strong commitment to it.
- d.8 Develop a standard way to work in and effectively deal with unethical behaviour of other members of healthcare team.

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 Degree No.6854, in its session No.177 Dated: 18\5\2009).
- Faculty of medicine, Minia University has developed the academic standards (ARS) for Master (MSc) program and approved in faculty Council decree No.7528, in its session No.191, dated: 1\3\2010) and it was updated with faculty council. (Dated: 20/2/2023) **{Annex 1}**.

- Then forensic medicine & clinical toxicology department has developed the intended learning outcomes (ILOs) for Master (MSc) program specifications in Forensic Medicine & Toxicology and the Date of program specifications 1st approval by department council. (13\5\2013) and it was updated with department council. (Dated: 5/3/2023) {Annex2}.

4. Program External References

- External reference (Benchmark): Program of master degree in Forensic Medicine & Toxicology of the University of **Maryland School of Medicine, Baltimore, USA.**
<https://www.medschool.umaryland.edu><https://www.graduate.umaryland.edu/forensicmedicine/>.

- Matrices: Comparison between the intended learning outcomes (ILOs) in master of Forensic medicine and Toxicology programme of the Faculty of Medicine, Minia University and that of the University Of **Maryland School Of Medicine, Baltimore, USA.** {Annex 3}.

5. Program structure:

Program duration: 4 semester (2 years).

Subject	Hour/week		
	Lectures	Practical	Clinical
First part (≥6 months)			
Toxicology	2	4	
Forensic chemistry	3	3	
Forensic pathology	2	3	
Anatomy	2	3	
Medical Ethics	2	1	
Thesis			
Second part (≥18 months)			
Forensic medicine and Injuries & infirmity	8	8	

- Basic sciences courses: Two (Anatomy Percentage:15%, Medical ethics)
- Specific courses related to the specialty: Four. Percentage: 85%.
- Training programs and workshops, field visits, seminars & other scientific activities: Distributed along the whole program.

6. Program courses

N.B. {Courses' specifications are present in **Annex 4**} & {Correlations of Program ILOs with courses are present in **Annex 5**}.

Course Title		Total No. of hours	No. of hours			Program ILOs Covered
			Lect.	Practical	Tutorial	
FIRST PART (Level of course):						
<u>Toxicology:</u>		144	48	96		a6, a10, b3, a9, b3, c6
<u>Forensic chemistry:</u>		144	72	72		c6, a10
<u>Forensic pathology:</u>		120	48	72		a8, a9, a10, a11, b3
<u>Anatomy:</u>		120	48	72		a2, b2, c4
<u>Medical Ethics:</u>		45	30	15		a1, a2, a13, a16, b1, b4, b5, c5, c7, d4, d8
Training programs and workshops, field visits, seminars& other scientific activities		Continuous				d1,d2,d3,d4,d5, d6,d7,d8
SECOND PART (Level of course):						
<u>Forensic medicine and Injuries & infirmity:</u>		832	416	416		a15,c1,b6,,b2,c4 ,c5, a3,c6,c3 , a1,a2.a12,a13,b 1,b4
Clinical training in the administration of forensic medicine		2 hrs/w				
Training programs and workshops, field visits, seminars& other scientific activities		Continuous				d1,d2,d3,d4, d5,d6,d7,d8

7. program admission requirements:

1. General requirements:

A. Candidates should have either:

1. MBCH 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 officer training year.

C. Follows postgraduate regulatory rules of Faculty of medicine, Minia University.

2. Specific requirements:

A. Candidates graduated from Egyptian universities should "Good Rank" in their final year/cumulative year's examination and grade "Good Rank" in Forensic medicine and Clinical Toxicology course too.

B. Candidate should know how to speak and write English well.

C. Candidate should have computer skills.

8. Regulations for progression and program completion

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

First Part: (≥ 6 months=1 semester):

- Toxicology course.
- Forensic chemistry course.
- Forensic pathology course.
- Anatomy course
- Medical Ethics course
- All courses as specified in the internal bylaw
- At least six months after registration should pass before the student can ask for examination in the 1st part.
- Two sets of exams: 1st in April — 2nd in October.
 - Written exam 3 hrs in toxicology + oral + practical exam,
 - Written exam 3 hrs in forensic chemistry + oral + practical exam,
 - Written exam 3 hrs in forensic pathology + oral + practical exam,
 - Written exam 3 hrs in Medical ethics+ oral + practical exam.

- 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 after at least 6 month 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 occurs after acceptance and\ or publishing one thesis-based paper in local or international journal and this is enough to pass this part.

Second Part: (≥18 months=3 semesters):

- Program related specialized Courses.
- At least 18 months after passing the 1st part should pass before the student can ask for examination in the 2nd part.
- Two sets of exams: 1st in April— 2nd in October.
- Two written exams each one 3 hrs in forensic medicine + oral + practical exam,
- Oral exam in injuries & infirmity
- Clinical exam in the morgue and Forensic report exam

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.

For both parts, fulfillment of the of log book.

9. Evaluation of program intended learning outcomes:

Evaluator (By whom)	Method/tool	Sample
1. Senior students (Students of last year)	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
6. Exams results	Results analysis Report	Attached to the file

10. Teaching and learning methods:

- 1- Hours of lectures per week throughout the course.
- 2-Hours of practical training and demonstration weekly throughout the course (case based discussion).
- 3-Self training activities such as use of internet and multimedia.
- 4- Regular weekly seminars, presentations and assignments.
- 5-Training courses & workshops.
- 6-Thesis discussion.
- 7-Conference attendance
- 8- Movie based learning

Teaching and learning methods	The assessed ILOs
<ul style="list-style-type: none"> • Lectures 	<p>A1,A2, A3,A4,A6, A7,A8,A9,A10,A11,A12,A13,A14,A15, A16,A17</p> <p>B1,B2,B3,B4,B5,B6,B8,B9</p>
<ul style="list-style-type: none"> • Practical sessions 	<p>C1,C2,C3,C4,C5,C6,C7</p>
<ul style="list-style-type: none"> • Self-training activities • Seminars, presentations and assignments. . • Training courses & workshops. • Thesis discussion. • Conference attendance • Movie based learning 	<p>D1,D2,D3,D4,D5,D6,D7,D8</p>

11. Methods of student assessment:

Method of assessment	The assessed ILOs
<p>1. Written Exams:</p> <ul style="list-style-type: none"> • Short essay 	<p>A1,A2, A3,A4,A6, A7,A8,A9,A10,A11,A12,A13,A14,A15,A16,A17</p>

<ul style="list-style-type: none"> • MCQs • Problem solving 	B1,B2,B3,B4,B5,B6,B8,B9
2. Practical Exams (OSPE)	C1,C2,C3,C4,C5,C6,C7
3. Oral Exams	A1,A2, A3,A4,A6, A7,A8,A9,A10,A11,A12,A13,A14,A15,A16,A17 B1,B2,B3,B4,B5,B6,B8,B9

Weighing of assessment:

It is mandatory to pass all the papers of written exams separately

Course	written	oral	Practical	Total
Toxicology	40	30	30	100
Forensic chemistry	40	30	30	100
Forensic pathology	20	15	15	50
Anatomy	20	15	15	50
Medical Ethics	40	30	30	100
Forensic medicine and Injuries & infirmity	280 (40%) 1 st paper 140 2 nd paper 140	170	90 + 80 (clinical exam in the morgue for injuries and infirmity) + 80 (Forensic report exam)	700

Program Coordinators:

1. Prof. Dr. Manal Abdel-Aziz
2. Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr/ Irene Atef Fawzy



Date of program specifications 1st approval by department council: 13/5/2013

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

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

NAQAAE General Academic Reference Standards “GARS” for Master Programs	Master Program - faculty of medicine- Minia University
<p>١. مواصفات الخريج: خريج برنامج الماجستير في أي تخصص يجب أن يكون قادرا على</p>	<p>1. Graduate Attributes: Graduate of master (MSC) program should be able to:</p>
<p>1.1. إجابة تطبيق أساسيات ومنهجيات البحث العلمي واستخدام أدواته المختلفة.</p>	<p>1.1. Understanding and applying of basics of research method and research tools.</p>
<p>2.1. تطبيق المنهج التحليلي واستخدامه في مجال التخصص</p>	<p>2.1. Critically analyze, evaluate, and effectively communicate findings, theories, and methods.</p>
<p>3.1. تطبيق المعارف المتخصصة و دمجها مع المعارف ذات العلاقة في ممارسته المهنية.</p>	<p>3.1. Apply integrated professional and general knowledge in his scholarly field and at the interface between different fields.</p>
<p>4.1. إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص.</p>	<p>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.</p>
<p>5.1. تحديد المشكلات المهنية وإيجاد حلول لها.</p>	<p>5.1. Demonstrating proficiency, required to solve current complex problems in his scholarly field.</p>
<p>6.1. إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية.</p>	<p>6.1. Master a variety of technical skills in his scholarly field and expert relevant equipment, technology, and software.</p>
<p>7.1. لتواصل بفاعلية والقدرة على قيادة فرق العمل.</p>	<p>7.1. Gain leadership skills and be able to communicate efficiently with colleagues and get the best results.</p>
<p>8.1. اتخاذ القرار في سياقات مهنية مختلفة.</p>	<p>8.1. Take professional situational decisions and logically support them.</p>

9.1. توظيف الموارد المتاحة بما يحقق أعلى استفادة و الحفاظ عليها	9.1. Optimal use of available resources to achieve research or best patient health care and ensure its maintenance.
10.1. إظهار الوعي بدوره في تنمية المجتمع والحفاظ على البيئة في ضوء المتغيرات.	10.1. Demonstrate awareness of its role in community health development.
11.1. التصرف بما يعكس الالتزام بالنزاهة والمصادقية والالتزام بقواعد المهنة.	11.1. Exhibit ethical behavior that reflect commitment to the code of practice.
12.1. تنمية ذاته أكاديميا ومهنيا و قادرا علي التعلم المستمر.	12.1. Demonstrate the ability to sustain a lifelong personal and professional growth.
<p>٢. المعايير القياسية العامة: NAQAAE General Academic Reference Standards "GARS" for Master Programs</p>	<p>2. Faculty Academic Reference Standards (ARS) for Master Program</p>
٢, ١. المعرفة والفهم: بانتهاؤ دراسة برنامج الماجستير يجب أن يكون الخريج قادرا علي الفهم والدراسة بكل من:	<p>2.1. Knowledge & Understanding:</p> <p>Upon completion of the Master Program in Forensic Medicine and Toxicology, the graduate should have sufficient knowledge and understanding of:</p>
٢, ١, ١. النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة	2.1.1. Understand the scientific basis and modern knowledge in the field of specialization and related medical sciences.
٢, ١, ٢. التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة	2.1.2. The mutual influence of professional practice on work environment, working conditions, and job characteristics.
٢, ١, ٣. التطورات العلمية في مجال التخصص	2.1.3. Scientific developments in the field of specialization.
٢, ١, ٤. المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص	2.1.4. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.
٢, ١, ٥. مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص	2.1.5. Quality principles in the scholarly field.
٢, ١, ٦. أساسيات وأخلاقيات البحث العلمي	2.1.6. Basis of research methodology and medical ethics.

<p>2.2. المهارات الذهنية: بانتهاج دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:</p>	<p>2.2. Intellectual Skills: Upon completion of the Master Program in Forensic Medicine and Toxicology, the graduate should be able to:</p>
<p>2.2.1. تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل</p>	<p>2.2.1. Use judgment skills for analytical and critical problem solving.</p>
<p>2.2.2. حل المشاكل المتخصصة مع عدم توافر بعض المعطيات</p>	<p>2.2.2. Capable of integrating knowledge and dealing with complex subjects to solve problems.</p>
<p>2.2.3. الربط بين المعارف المختلفة لحل المشاكل المهنية</p>	<p>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.</p>
<p>2.2.4. إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية</p>	<p>2.2.4. Effectively apply research methods and carrying out a medical research thesis</p>
<p>2.2.5. تقييم المخاطر في الممارسات المهنية في مجال التخصص</p>	<p>2.2.5. Be aware of risk management principles, and patient safety.</p>
<p>2.2.6. التخطيط لتطوير الأداء في مجال التخصص</p>	<p>2.2.6. Establish goals, commitments, and strategies for improved professional performance in the field of specialty.</p>
<p>2.2.7. اتخاذ القرارات المهنية في سياقات مهنية متنوعة.</p>	<p>2.2.7. Take professional situational decisions and logically support them.</p>
<p>3.2. المهارات المهنية: بانتهاج دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:</p>	<p>3.2. Professional Skills: Upon completion of the Master Program in Forensic Medicine and Toxicology, the graduate must be able to:</p>
<p>3.2.1. إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص</p>	<p>3.2.1. Master the basic and some advanced professional skills in his scholarly field.</p>
<p>٣,٢,٢ كتابة و تقييم التقارير المهني.</p>	<p>3.2.2. Write and evaluate medical or scientific reports.</p>
<p>٣,٣,٣ تقييم الطرق والأدوات القائمة في مجال التخصص</p>	<p>3.2.3. Assess and evaluate technical tools during research.</p>

<p>4.2. المهارات العامة والمنتقلة : بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:</p>	<p>4.2. General and transferable skills Upon completion of the Master Program in Forensic Medicine and Toxicology, the graduate should be able to:</p>
<p>٤,٢,١ . التواصل الفعال بأنواعه المختلفة</p>	<p>4.2.1. Communicate effectively using a written medical record, electronic medical record, or other digital technology.</p>
<p>٤,٢,٢ . استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية</p>	<p>4.2.2. Use of information technology (computer to create, process, store, secure and exchange electronic data) in the field of medical practice.</p>
<p>4.2.3. لتقييم الذاتي وتحديد احتياجاته التعليمية الشخصية</p>	<p>4.2.3. Assess himself and identify personal learning needs.</p>
<p>4.2.4. استخدام المصادر المختلفة للحصول على المعلومات والمعارف</p>	<p>4.2.4. Use various sources for information (physical and digital sources).</p>
<p>4.3.5. وضع قواعد ومؤشرات تقييم أداء الآخرين</p>	<p>4.2.5. Setting indicators for evaluating the performance of others.</p>
<p>4.2.6. العمل في فريق، وقيادة فرق في سياقات مهنية مختلفة</p>	<p>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.</p>
<p>4.2.7. إدارة الوقت بكفاءة</p>	<p>4.2.7. Manage time efficiently.</p>
<p>٤,٢,٨ . التعلم الذاتي والمستمر</p>	<p>4.2.8. Demonstrate skills of self-learning and lifelong learning needs of medical profession.</p>

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

- Annex (2): ARS VS. MSc PROGRAM of Forensic Medicine & Toxicology

<p align="center">٢. المعايير القياسية العامة: NAQAAE General Academic Reference Standards “GARS” for Master Programs</p>	<p align="center">2. Faculty Academic Reference Standards (ARS) for Master Program</p>	<p align="center">MSc Program of Forensic Medicine and Toxicology</p>
<p align="center">٢,١. المعرفة والفهم: بانتهاج دراسة برنامج الماجستير يجب أن يكون الخريج قادرا علي الفهم والدراسة بكل من:</p>	<p align="center">2.1. Knowledge & Understanding: Upon completion of the Master Program, the graduate should have sufficient knowledge and understanding of:</p>	<p align="center">2.1. Knowledge and Understanding Upon completion of the master Program (MSc) in Forensic Medicine and Toxicology the graduate should be able to:</p>
<p align="center">٢,١,١. 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>a.1 Explain various medicolegal aspects of malpractice & ethics. a.2 Recognize his/her medical knowledge in the service of law with emphasis on medicolegal aspects of medical practice. a.3 Explain medicolegal aspects of blood grouping and DNA in forensic field. a.4 Explain medicolegal aspects of different cases of sexual offences. a.5 Explain maternal and infant morbidity and mortality from medicolegal aspects.a.6 Define the basics of general toxicology. a.7 Define the basics of systemic toxicology. a.8 Define the basics of specific toxicology.</p>
<p align="center">٢,١,٢. التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة</p>	<p>2.1.2. The mutual influence of professional practice on work environment, working conditions, and job characteristics.</p>	<p>a.9 Describe different classes of common toxic substances and environmental pollution and how to eliminate toxin from body. a.12 Tell the mutual influence between professional practice and its impacts on the environment.</p>

٢,١,٣. التطورات العلمية في مجال التخصص	2.1.3. Scientific developments in the field of specialization	a.11 Tell scientific development in the field of forensic medicine & toxicology. a.17 Identify and recent developments in common problems related to the field of forensic medicine and clinical toxicology.
٢,١,٤. المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص	2.1.4. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors	a.13 Recognize the ethical and legal principles of professional practice in the field of forensic medicine.
٢,١,٥. مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص	2.1.5. Quality principles in the scholarly field	a.10 Explain different groups of toxic substances and drugs and its differential diagnosis and how to do first aid measurements for each one. a.14 Explain the principles of quality in professional practice in the field of forensic medicine. a.15 Explain medicolegal aspects of identification of both live & dead person.
٢,١,٦. أساسيات وأخلاقيات البحث العلمي	2.1.6. Basis of research methodology and medical ethics.	a.16 Identify the basics and ethics of scientific research.
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 (MSc) in Forensic Medicine and Toxicology, the graduate must be able to:
2.2.1. تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل	2.2.1. Use judgement skills for analytical and critical problem solving	b.2 Recognize different traumatic/wound cases and how to create a report for each case and how to deal with it. b.3 Recognize different intoxicated patients and a treatment plan. b.4 Modify common ethical dilemma and suggest a proper solution. b.5 Interpret between knowledge for Professional problems' solving.
2.2.2. حل المشاكل المتخصصة مع عدم توافر بعض المعطيات	2.2.2. Capable of integrating knowledge and dealing with complex subjects to solve problems	b.1 Classify different problems of malpractices. b.6 Recognize risk in professional practices in the field of forensic medicine.
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	b.7 Design a research study and / or create a scientific study on a research problem.

	findings to solve research or a clinical problem.	
2.2.4. إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية	2.2.4. Effectively apply research methods and carrying out a medical research thesis	b.7 Design a research study and / or create a scientific study on a research problem. b.8 Plan for the development of performance in the field of forensic medicine. b.9 Recognize researches and issues related to forensic medicine.
2.2.5. تقييم المخاطر في الممارسات المهنية في مجال التخصص	2.2.5. Be aware of risk management principles, and patient safety.	b.3 Recognize different intoxicated patients and a treatment plan. b.6 Recognize risk in professional practices in the field of forensic medicine.
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	b.2 Recognize different traumatic/wound cases and how to create a report for each case and how to deal with it.
2.2.7. اتخاذ القرارات المهنية في سياقات مهنية متنوعة.	2.2.7. Take professional situational decisions and logically support them.	b.3 Recognize different intoxicated patients and a treatment plan. b.5 Interpret between knowledge for Professional problems' solving.
3.2. المهارات المهنية: بانتهاج 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:	2.3. (c) Professional and practical skills Upon completion of the master program (MSc) in Forensic Medicine and Toxicology, 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.	c.1 Examine living and dead individuals. c.2 Classify death by different clinical and investigatory methods. c.3 Conclude time pass since death through assessment of Postmortem changes.
٣,٢,٢ كتابة و تقييم التقارير المهني.	3.2.2. Write and evaluate medical or scientific reports	c.5 Apply a proper primary report. c.7 Modify Forensic reports.
٣,٣,٣ تقييم الطرق والأدوات القائمة في مجال التخصص	3.2.3. Assess and evaluate technical tools during research	c.4 Recognize different wounds and injuries.

		c.6 Recognize a preliminary test for blood grouping and toxicological screen.
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. (d) General and transferable skills Upon completion of the master program (MSc) in Forensic Medicine and Toxicology, the graduate must be able to:
٤,٢,١. التواصل الفعال بأنواعه المختلفة	4.2.1. Communicate effectively using a written medical record, electronic medical record, or other digital technology.	d.4 Recognize Ethical behavior to all patients irrespective of their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture. d.6 Collaborate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.
٤,٢,٢. استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية	4.2.2. Use of information technology (computer to create, process, store, secure and exchange electronic data) in the field of medical practice.	d.1 Design database to collect material needed for research. d.2 Develop and working in material from various sources (including library, electronic and online resources).
4.2.3. لتقييم الذاتي وتحديد احتياجاته التعليمية الشخصية	4.2.3. Assess himself and identify personal learning needs	d.7 Recognize the importance of Life-long learning of the importance of life-long self-learning and show a strong commitment to it. d.8 Develop a standard way to work in and effectively deal with unethical behaviour of other members of healthcare team.
4.2.4. استخدام المصادر المختلفة للحصول على المعلومات والمعارف	4.2.4. Use various sources for information (physical and digital sources).	d.1 Design database to collect material needed for research. d.2 Develop and working in material from various sources (including library, electronic and online resources).
4.3.5. وضع قواعد ومؤشرات تقييم أداء الآخرين	4.2.5. Setting indicators for evaluating the performance of others	d.6 Collaborate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors. d.8 Develop a standard way to work in and effectively deal with unethical

		behaviour of other members of healthcare team.
4.2.6. العمل في فريق، وقيادة فرق في سياقات مهنية مختلفة	4.2.6. Work in a team, and Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system	d.6 Collaborate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors. d.7 Recognize the importance of Life-long learning of the importance of life-long self-learning and show a strong commitment to it.
4.2.7. إدارة الوقت بكفاءة	4.2.7. Manage time efficiently	d.8 Develop a standard way to work in and effectively deal with unethical behaviour of other members of healthcare team.
٤,٢,٨. التعلم الذاتي والمستمر	4.2.8. Demonstrate skills of self-learning and lifelong learning needs of medical profession.	d.3 Classify working in a research assignment orally and deliver it in both written and electronic forms. d.5 Classify management of medicolegal problems.

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

- Annex (3): Comparison between the intended learning outcomes (ILOs) in master of Forensic medicine and Toxicology program of the Faculty of Medicine, Minia University and that of the University Of Maryland School Of Medicine, Baltimore, USA.

Master of Forensic medicine and Toxicology, University Of Maryland School Of Medicine, Baltimore, USA	ILOs in master of Forensic medicine and Toxicology program, Faculty of medicine, Minia University	Approximate achievable ILOs
1- Forensic Pathology MODULE	<ul style="list-style-type: none"> - A3,A4,A6,A8,A9,A11,A12,A15,B2,B8 - C1,C2,C3,C4,D1,D3,D5,D7,D8 	70%
2- Forensic Autopsy MODULE	<ul style="list-style-type: none"> - A3,A4,A5,A7,A8,A9,A11,A15,A17, B2,B3,B4,B5,B6B8 - C1,C2,C3,C4,C6,D2,D4,D5,D6,D8 	90%
3- Medico-legal Death Scene Investigation MODULE	<ul style="list-style-type: none"> - A2,A6,A7,A8A12,A13,A14,B1,B2B6,B9 - C2,C3,D5,D6,D7D8 	70%
4- Criminal Law and Forensic Science MODULE	<ul style="list-style-type: none"> - A2,A4,A5,A6,A7,A12A13,B6,B7,B8 - C2,C3,C4,D2,D4,D5,D7,D8 	65%
5- Epidemiological Data Research Capstone Project MODULE	<ul style="list-style-type: none"> - A11,A14,A16,A17,B5,B7,B8,B9 - C1,C3,C4,C5,D1,D2,D3,D4,D6,D7,D8 	75%
6- General Pathology MODULE	<ul style="list-style-type: none"> - A3,A4,A5,A6,A8,A9,A13,A14,A1, B2,B6,B7,B8 - C1,C2,C3,C4,D5,D7,D8 	70%
7- Systemic Pathology MODULE	<ul style="list-style-type: none"> - A3,A4,A6,A7,A9,A11,A13,A15 - B2,B5,B6,B7,B8 - C1,C2,C3,C4,D4,D5 	70%
8- Forensic Toxicology MODULE	<ul style="list-style-type: none"> - A3,A4,A5A6,A7,A8,A9,A10,A11,A17 - B3,B4,B5,B6,B8 - C2,C3,C4,C5,C6,D2,D4,D5,D7 	80%
9- Introduction to Library Resources and Scholarly Writing MODULE	<ul style="list-style-type: none"> - A3,A5,A9,A11,A14,A16,A17 - B5,B7,B8,B9 - C3,C5,D1,D4,D6,D7,D8 	75%
10- Forensic Toxicology Laboratory MODULE	<ul style="list-style-type: none"> - A1,A2,A3,A4,A6,A7,A8,A9,A10,A11,A17 - B3,B4,B5,B7,B8 - C2,C6,D1,D3,D5,D6,D8 	80%

11- Homicide Evidence Seminar MODULE	<ul style="list-style-type: none"> - A2,A3,A5,A7,A8,A9,A10,A11A12,A13,A14 - B1,B2,B3,B4,B6,B9 - C2,C3,C5,D2,D3,D4,D5,D6,D7 	80%
12- Forensic Radiology MODULE	<ul style="list-style-type: none"> - A1,A3,A4,A5,A12,A14,A17,B3,B4,B5,B8 - C2,C4,C5,D2,D3,D4,D6,D8 	65%
13- Forensic Odontology and Forensic Anthropology MODULE	<ul style="list-style-type: none"> - A3,A5,A6,A8,A9,A10,A11,A13,A17, - B2,B4,B6,B7,B8 - C1,C2,C4,C5,D2,D4,D5,D7,D8 	80%
14- Evidence MODULE	<ul style="list-style-type: none"> - A2,A3,A4,A6,A8,A9,A11,A12,A13,A14,A17 - B5,B7,B8 - C2,C5,C7,D1,D2,D4,D5,D6,D8 	95%
15- Scientific Evidence MODULE	<ul style="list-style-type: none"> - A2,A3,A5,A6,A8,A9,A11,A12,A13,A14,A17 - B2,B3,B5,B8 - C2,C4,C5,C6,C7,D1,D2,D4,D6,D7,D8 	95%

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

Annex 5

Master Degree (MSC) in forensic medicine & Toxicology	مسمى البرنامج
FT200	كود البرنامج

جامعة/أكاديمية :المنيا.....

كلية / معهد:الطب البشري.....

قسم:الطب الشرعي والسموم
الكلينكية.....

A- Matrix of Coverage of MSC Program ILOs By Course

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
First part	A1 A4 A5	B1 B4 B5	C2 C4	D1 D4 D6 D7
1- Toxicology	A1 A4 A5	B1 B4 B5	C2 C4	D1 D4 D6 D7
2- Forensic Pathology	A1 A3 A7 A9	B2 B3 B6	C2 C5	D2 D4 D7 D8
3- Forensic Chemistry	A1 A5 A6 A8 A10	B4 B8	C2 C6	D3 D4 D7 D8
4- Anatomy	A1 A3 A11	B3 B7	C2	D4 D5 D7 D8
5- Medical ethics	A1 A2 A13 A16	B1 B4 B5	C5 C7	D4 D8
Research (Thesis)	A1,A4,A5,A6,A7,A8,A9, A10 A11,A12,A13, A14, A15, A16, A17	B1,B2,B3, B5,B6, B7,B8, B9	C1,C2,C3, C4, C5, C6,C7	D1,D2, D3,D4, D5 D6,D7,D8
2nd part Forensic Medicine and Injuries & Infirmary	A1 A4 A5 A12 A13 A14 A15 A16 A17	B4 B5 B8 B9	C1 C2 C3 C6 C7	D4 D6 D7 D8

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

B- Matrix of Coverage of Program 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,A7, A8,A9,A10,A11,A12,A13 ,A14,A15,A16,A17	B1,B2,B3,B4,B5,B6,B7,B8, B9	-	-
Practical	-	-	C1,C2,C3,C4,C5,C6,C7	-
Presentation/seminar	-	-	-	D1, D2, D3, D4, D5, D6, D7, D8
Journal club	-	-	-	D1, D4
Thesis discussion	-	-	-	D1, D2, D3, D4, D5, D6, D7, D8
Training courses & workshops	-	-	-	D1, D2, D3, D4, D5, D6, D7, D8
Movie based learning	-	-	-	D1, D2, D3, D4, D5, D6

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

C- Matrix of Coverage of Program 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,A9,A10,A11,A12,A13,A14,A15,A16,A17	B1,B2,B3,B4,B5,B6,B7,B8	-	-
Practical exam	-	-	C1,C2,C3,C4,C5, C6,C7	-
Oral Exam	A1,A2,A3,A4,A5,A6,A7, A8,A9,A10,A11,A12,A13,A14,A15,A16,A17	B1,B2,B3,B4,B5,B6,B7,B8	-	-

Program Coordinators:

1. Prof. Dr. Manal Abdel-Aziz
2. Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr/ Irene Atef Fawzy

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

Course Specifications (Master Degree (MSc) of Forensic Medicine & Toxicology)

Course Specifications of Toxicology In master of Forensic medicine and Toxicology (First part) 2022-2023

University: Minia University

Faculty: Faculty of Medicine

Department offering the course: Forensic Medicine & Clinical Toxicology Department.

Course Specifications:

It is a part of the Postgraduate (MSc) Program for the Forensic Medicine & Clinical Toxicology Department.

Program (s) on which the course is given: First part MSc of Forensic medicine and Toxicology.

Major or minor element of programs: Toxicology, Toxic agents, first care management.

1- Basic Course Information		
<ul style="list-style-type: none">• Academic Year/level: first part MSc, Forensic medicine and Toxicology	<ul style="list-style-type: none">• Course Title: course specification in Toxicology	<ul style="list-style-type: none">• Code : FT200
<ul style="list-style-type: none">• Number of teaching hours:<ul style="list-style-type: none">- Lectures: 2 hours/week- Practical: 4 hours/week		
2- Overall Aims of the course	<p><i>The aim of this course is to provide the postgraduate student with the medical knowledge and skills essential for the practice of specialty and necessary to gain further training and practice in the field of Toxicology through providing:</i></p> <ol style="list-style-type: none">1- Scientific knowledge essential for the practice of forensic medicine & toxicology according to the international standards.2- Basic skills necessary for dealing with different medical aspects of living & dead individuals; and proper	

	<p>management (diagnosis and treatment) of intoxicated patients.</p> <p>3- Provision of sound ethical principles related to medical practice.</p> <p>4- Active participation in community needs assessment and problems solving.</p> <p>5- Developing learning abilities necessary for continuous medical education.</p> <p>6- Upgrading research interest and abilities.</p>
<p>3- Intended learning outcomes of course (ILOs):</p> <p><i>Upon completion of the course, the postgraduate student should be able to:</i></p>	
<p>A- Knowledge and Understanding</p>	<p>a.1 Identify his/her medical knowledge in the service of law with emphasis on medicolegal aspects of medical practice.</p> <p>a.2 Recognize the basics of general toxicology.</p> <p>a.3 Recognize the basics of systemic toxicology.</p> <p>a.4 Recognize the basics of specific toxicology.</p> <p>a.5 Define different classes of common toxic substances and environmental pollution and how to eliminate toxin from body.</p> <p>a.6 Explain different groups of toxic substances and drugs and its differential diagnosis and how to do first aid measurements for each one.</p> <p>a.7 Tell scientific development in the field of toxicology.</p> <p>a.8 Tell the mutual influence between professional practice and its impacts on the environment.</p> <p>a.9 Identify the basics and ethics of scientific research.</p>

	<p>a.10 Identify and recent developments in common problems related to the field of clinical toxicology</p>
<p>B- Intellectual Skills</p>	<p>b.1. Interpret researches and issues related to toxicology.</p> <p>b.2. Classify different problems of malpractices.</p> <p>b.3. Cite different intoxicated patients and a treatment plan.</p> <p>b.4. Assess common ethical dilemma and suggest a proper solution.</p> <p>b.5. Interpret between knowledge for Professional problems' solving.</p> <p>b.6. Tell risk in professional practices in the field of toxicology.</p> <p>b.7. Plan a research study and / or create a scientific study on a research problem.</p> <p>b.8. Tell for the development of performance in the field of toxicology.</p>
<p>C- Professional and Practical Skills</p>	<p>c.1 Design toxicological report</p> <p>c.2 Recognize a preliminary test for and toxicological screen.</p>
<p>D- General and transferable Skills</p>	<p>d.1 Apply database to collect material needed for research.</p> <p>d.2 Connect and working in material from various sources (including library, electronic and online resources).</p> <p>d.3 Classify working in a research assignment orally and deliver it in both written and electronic forms.</p> <p>d.4 Recognize Ethical behavior to all patients irrespective of their socioeconomic levels, culture</p>

	<p>or religious beliefs and use language appropriate to the patient's culture</p> <p>d.5 Arrange management of medicolegal problems.</p> <p>d.6 Connect effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.</p> <p>d.7 Recognize life -long learning of the importance of life-long self-learning and show a strong commitment to it.</p> <p>d.8 Respond to working in and effectively deal with unethical behavior of other members of healthcare team.</p>
--	---

4.Course Contents

Course title	Total hrs.	No. of hrs.		Program ILOs covered
		L	P	
<u>I. Toxicology</u>				
<u>General toxicology:</u>				
Coma	1	1		a6, b3
Convulsion	1	1		a6, b3
Shock	1	1		a6, b3
Antidotes	1	1		a6, b3
Toxidromes	1	1		a6, a10, b3
Management of acute intoxicated patients	11	3	8	a6, a9, a10, b3
<u>Systemic toxicology</u>				
- Hepatotoxicity	4.5	1.5	3	a7, b3
- Haemotoxicity	4.5	1.5	3	a7, b3
- Cardiotoxicity	4.5	1.5	3	a7, b3

- Neurotoxicity	4.5	1.5	3	a7, b3
- Nephrotoxicity	4.5	1.5	3	a7, b3
- Respiratory toxicity	4.5	1.5	3	a7, b3
- Dermatotoxicity	3	1	2	a7, b3
- Ophthalmotoxicity	3	1	2	a7, b3
- ENT toxicity	3	1	2	a7, b3
<u>Specific toxicology</u>				
- Poisons classification & Factors affecting toxicity	1	1		a8, a9, a10, a11, b3
- Corrosives	6.5	1.5	5	a8, a9, a10, a11, b3
- Heavy metals	4	2	2	a8, a9, a10, a11, b3
- Toxic gases	8	3	5	a8, a9, a10, a11, b3
- Toxic plants	8	3	5	a8, a9, a10, a11, b3
- Pesticides	11	3	8	a8, a9, a10, a11, b3
- Food poisoning	5.5	1.5	4	a8, a9, a10, a11, b3
- Animal poisoning	6	2	4	a8, a9, a10, a11, b3
- Insects poisoning	7	1	6	a8, a9, a10, a11, b3
- Drugs intoxication	28	8	20	a8, a9, a10, a11, b3
- Alcohol intoxication	7	2	5	a8, a9, a10, a11, b3
5. Teaching and Learning Methods	<p>5.1- Lecture: live, online, and pre-recorded video lectures.</p> <p>5.2- Practical lessons.</p> <p>5.3- Seminars.</p> <p>5.4- Searches in computers (assignments).</p> <p>5.5- Movie based learning</p>			

6- Student assessment methods

6.1- log book

6.2- **Written exams:**

Short essay: to assess knowledge

Problem solving: to Assess intellectual skills

MCQ: to assess knowledge and intellectual skills

6.3- **Practical Exams (OSPE):** to assess practical and professional skills

6.4- **Oral Exams:** to assess knowledge, understanding, attitude, and communication.

- Assessment Schedule (Timing of Each Method of Assessment)

Assessment 1: Final written exam week: 24-28

Assessment 2: Oral exam week: 24-28

Assessment 3: Practical exam week: 24-28

7-Weighting of assessments

Written exam	40
Oral exam	30
Practical examination	30
Total	100

8- List of references

8.1- Course notes: - Department Books, and notes.

-Logbook

8.2- Essential books (textbooks)

- Viccellio P. (1993): Handbook of Medical Toxicology, Boston, USA: Little Brown & Co., 812 pages. ISBN: 9780316902472.

8.3- Periodicals:

Findarticle.com

Freemedicaljournals.com

8.4-EssentialBooks:

Nelson L., Hoffman R., Howland M. N., et al. (2019): Goldfrank's Toxicologic Emergencies (11th ed.), New York, USA: McGraw-Hill Education / Medical, 2096 pages. ISBN: 9781259859618.

8.5-WebSites:

1. <http://www.ncbi.nlm.gov/>

2. <http://www.vlib.org/>

3. www.genome.ad.jp/kegg/regulation.

9- Facilities required for teaching and learning

1. Forensic Medicine and Clinical Toxicology research laboratory equipped with skill tools.
2. Classrooms for theoretical lectures and tutorials.

Course coordinators:

Prof. Dr. Manal Abdel-Aziz
Assistant Prof. Dr. Mohammed Ismail
Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr. / Irene Atef Fawzy



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

Matrix of Course ILOs vs. List of contents

نموذج رقم (١١)

Course Specifications of toxicology in MSC of forensic medicine & toxicology	مسمى المقرر
FT200	كود المقرر

جامعة/أكاديمية :المنيا.....

كلية / معهد:الطب

.....البشري.....

قسم:الطب الشرعي

.....والسموم..الكلينكية.....

A-Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics) Toxicology	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
1.Toxicology	A1 A2 A3 A4 A5 A6 A7 A8 A9 A10	B1 B2 B3 B4 B5 B6 B7 B8	C1 C2	D1 D2 D3 D4 D5 D6 D7 D8

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

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 A7 A8 A9 A10	B1 B2 B3 B4 B5 B6 B7 B8	-	-
Practical	-	-	C1, C2	-
Presentation/seminar	-	-	-	D1,D2,D3,D4,D 5,D6,D7,D8
Journal club	-	-	-	D1,D2,D4, D6
Thesis discussion	-	-	-	D1,D2,D3,D4,D 5,D6,D7,D8
Training courses & workshops	-	-	-	D1,D2,D3,D4,D 5,D6,D7,D8
Movie based learning	-	-	-	D1,D2,D3,D4,D 5,D6

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

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, A9, A10	B1, B2, B3, B4, B5, B6, B7, B8	-	-
Practical exam	-	-	C1, C2	-
Oral Exam	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	B1, B2, B3, B4, B5, B6, B7, B8	-	-

Course coordinators:

Prof. Dr. Manal Abdel-Aziz
 Assistant Prof. Dr. Mohammed Ismail
 Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr. / Irene Atef Fawzy



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

Course Specifications of Forensic Chemistry

In Master Degree of Forensic medicine and Toxicology (First part) 2022-2023

University: Minia

Faculty: Medicine

Department offering the course: Forensic medicine and Clinical Toxicology Department.

Course Specifications

It is a part of the Postgraduate (MSc) Program for the Forensic medicine and Clinical Toxicology Department.

Program (s) on which the course is given: First part MSc of Forensic medicine and Toxicology.

Major or minor element of programs: Forensic chemistry, Detection of poisons.

1- Basic Course Information		
<ul style="list-style-type: none">• Academic Year/level: first part MSc, Forensic medicine and Toxicology	<ul style="list-style-type: none">• Course Title: course specification in Forensic chemistry	<ul style="list-style-type: none">• Code : FT200
<ul style="list-style-type: none">• Number of teaching hours:<ul style="list-style-type: none">- Lectures: 3 hours/week- Practical: 3 hours/week		
2-Overall Aims of the course	<i>By the end of the course the postgraduate student must be able to:</i> 1- Scientific knowledge essential for the practice of forensic medicine & toxicology according to the international standards. 2- Basic skills necessary for detection of different toxic drugs and materials that will help for proper management (diagnosis and treatment) of intoxicated patients. 3- Provision of sound ethical principles related to deal with detection of abused drugs.	

	<p>4- Active participation in community needs assessment and problems solving.</p> <p>5- Developing learning abilities necessary for continuous medical education.</p> <p>6- Upgrading research interest and abilities.</p>
<p>3-Intended learning outcomes of course (ILOs):</p> <p><i>Upon completion of the course, the postgraduate student should be able to:</i></p>	
<p>A. Knowledge and Understanding</p>	<p>a.1 Explain various medicolegal aspects of detection of different drugs and screening them and its ethical aspect to deal with patients for screening them.</p> <p>a.2 Identify his/her medical knowledge in the service of law with emphasis on deal with different procedures to screening of different chemistry.</p> <p>a.3 Explain various aspects of detection of toxins.</p> <p>a.4 Explain various methods and new techniques for dealing with patients upon screening of abused drugs.</p> <p>a.5 Identify different toxic agents and their mechanisms that help for screening program.</p> <p>a.6 Tell scientific development in the field of forensic chemistry.</p> <p>a.7 Tell the mutual influence between professional practice and its impacts on the environment.</p> <p>a.8 Define the ethical and legal principles of professional practice in the field of forensic chemistry.</p> <p>a.9 Explain the principles of quality in professional practice in the field of forensic chemistry.</p> <p>a.10 Define new methods used in the forensic chemistry.</p> <p>a.11 Identify the basics and ethics of scientific research.</p>

	<p>a.12 Identify the recent developments in common problems related to the field of forensic chemistry.</p>
<p>B. Intellectual Skills</p>	<p>b.1 Interpret different problems of detection of different agents.</p> <p>b.2 Recognize different abused drugs and how to deal with each case to screen for these agents.</p> <p>b.3 Assess common ethical dilemma and suggest a proper solution.</p> <p>b.4 Utilize knowledge for Professional problems' solving.</p> <p>b.5 Identify risk in professional practices in the field of forensic chemistry.</p> <p>b.6 Design a research study and / or create a scientific study on a research problem.</p> <p>b.7 Plan for the development of performance in the field of forensic chemistry.</p> <p>b.8 Assess researches and issues related to forensic chemistry.</p>
<p>C. Professional and Practical Skills</p>	<p>c.1 Recognize different toxic agents and drugs.</p> <p>c.2 Imitate detection by different clinical and investigatory methods.</p> <p>c.3 Discover detection of drugs through assessment of different techniques.</p> <p>c.4 Identify different toxic elements.</p> <p>c.5 Organize a proper method according to the screening drug.</p> <p>c.6 Recognize a preliminary test for detection of drugs</p> <p>c.7 Recognize properties of different samples for proper detection of drugs and poisons.</p>

D. General and transferable Skills	<p>d.1 Adapt database to collect material needed for research.</p> <p>d.2 Connect and work in material from various sources (including library, electronic and online resources).</p> <p>d.3 Classify working in a research assignment orally and deliver it in both written and electronic forms.</p> <p>d.4 Illustrate Ethical behavior to all patients irrespective of their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture</p> <p>d.5 Arrange management of medicolegal problems.</p> <p>d.6 Connect effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.</p> <p>d.7 Recognize Life -long learning, the importance of life-long self-learning and show a strong commitment to it.</p> <p>d.8 Organize how to work and effectively deal with unethical behavior of other members of your team.</p>
---	---

4- Course Contents

Course title	Total hrs.	No. of hrs.		Program ILOs covered
		L	P	
Forensic chemistry				
Detection of plant alkaloids.	20	10	10	c6, a10
Detection of drugs.	24	12	12	c6, a10
Detection of drug of abuse.	20	10	10	c6, a10
Detection of gases.	20	10	10	c6, a10
Detection of alcohol.	20	10	10	c6, a10
Detection of organophosphorus.	20	10	10	c6, a10

Detection of heavy metals.	20	10	10	c6, a10
----------------------------	----	----	----	---------

5-Teaching and Learning Methods	<p>5.1- Lectures: live, online, and pre-recorded video lectures</p> <p>5.2- Practical lessons.</p> <p>5.3- Seminars.</p> <p>5.4- Searches in computers (assignments).</p> <p>5.5- Movie based learning</p>								
<p>6- Student Assessment Methods</p> <p>- Assessment Schedule (Timing of Each Method of Assessment)</p>	<p>6. 1- log book</p> <p>6.2- Written exams: Short essay: to assess knowledge Problem solving: to Asses intellectual skills MCQ: to assess knowledge and intellectual skills</p> <p>6.3- Practical Exams (OSPE): to assess practical and professional skills</p> <p>6.4- Oral Exams: to assess knowledge, understanding, attitude, and communication.</p> <p>Assessment 1: Final written exam week: 24-28 Assessment 2: Oral exam week: 24-28 Assessment 3: Practical exam week: 24-28</p>								
7- Weighting of Each Method of Assessment	<table> <tr> <td>Written exam</td> <td>40</td> </tr> <tr> <td>Oral exam</td> <td>30</td> </tr> <tr> <td>Practical examination</td> <td>30</td> </tr> <tr> <td>Total</td> <td>100</td> </tr> </table>	Written exam	40	Oral exam	30	Practical examination	30	Total	100
Written exam	40								
Oral exam	30								
Practical examination	30								
Total	100								
8. List of References									
A. Course Notes/handouts	<p>- Department Books, and notes.</p> <p>-Logbook</p>								
B. Essential Books	<p>Postmortem Toxicology: Challenges and Interpretive Considerations. 1st Edition; Academic Press, 2019. Timothy R. Rohrig.</p> <p>Forensic Toxicology, 2019. Sahar Y. Issa. DOI: 10.5772/intechopen.82869</p>								
C. Recommended Text Books	1. Lectures notes on clinical biochemistry, Whitby et al 1993								

	<p>2. Lippincott's illustrated reviews biochemistry, Champe, PC, Harvey, RA, 2005</p> <p>3. Clarke's Analytical Forensic Toxicology, Negrusz, Adam; Cooper, Gail, Second edition, 2013</p>
D. Periodicals, websites	<p>1. http://www.ncbi.nlm.gov/</p> <p>2. http://www.vlib.org/</p> <p>3. www.genome.ad.jp/kegg/regulation.</p>

9- Facilities required for teaching and learning

1. Forensic Medicine and Clinical Toxicology research laboratory equipped with skill tools.
2. Classrooms for theoretical lectures and tutorials.

Course coordinators:

Prof. Dr. Manal Abdel-Aziz
Assistant Prof. Dr. Mohammed Ismail
Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr. / Irene Atef Fawzy



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

Course Specifications of Forensic chemistry in MSC of forensic medicine & toxicology	مسمى المقرر
FT200	كود المقرر

نموذج رقم (١١ أ)

جامعة/أكاديمية :المنيا.....

كلية / معهد :الطب
.....البشري.....

قسم:الطب الشرعي
.....والسموم.الاكلينكية.....

A- Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics) Forensic Chemistry	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
I- Detection of plant alkaloids.	A2 A12	B2	C4-6	D1-7
II- Detection of drugs.	A2 A11	B3		
III- Detection of drug of abuse.	A2-3 A10	B3-4-8-9	C3-4-7	D2-8
IV- Detection of gases.	A2-4 A7	B2-5-6	C1-2	D3-6
V- Detection of alcohol.	A2-4-5-6	B3-4-7		
VI- Detection of organophosphorus.	A2-3-4-8-9	B1-3	C3-5	D2-4-5
VII- Detection of heavy metals.	A1-10-11	B1-2		

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

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 A7 A8 A9 A10 A11 A12	B1 B2 B3 B4 B5 B6 B7 B8 B9	-	-
Practical	-	-	C1 C2 C3 C4 C5 C6 C7	-
Presentation/seminar	-	-	-	D1,D2,D3,D4,D5,D6,D7,D8
Journal club	-	-	-	D1,D2,D3,D5,D7
Thesis discussion	-	-	-	D1,D2,D3,D4,D5,D6,D7,D8
Training courses & workshops	-	-	-	D1,D2,D3,D4,D5,D6,D7,D8
Movie based learning	-	-	-	D1,D2,D3,D4,D5,D6

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

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, A9, A10, A11, A12	B, B2, B3, B4, B5, B6, B7, B8	-	-
Practical exam	-	-	C1, C2, C3, C4, C5, C6, C7	-
Oral Exam	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12	B, B2, B3, B4, B5, B6, B7, B8	-	-

Course coordinators:

Prof. Dr. Manal Abdel-Aziz
Assistant Prof. Dr. Mohammed Ismail
Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr. / Irene Atef Fawzy



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

Course Specifications of Forensic Pathology

In Master Degree of Forensic medicine and Toxicology (First part) 2022-2023

University: Minia University

Faculty: Faculty of Medicine

Department offering the course: Forensic Medicine & Clinical Toxicology Department.

Course Specifications

It is a part of the Postgraduate (MSc) Program for the Forensic Medicine & Clinical Toxicology Department.

Program (s) on which the course is given: First part MSc of Forensic medicine and Toxicology.

Major or minor element of programs: Pathology, diseases

1- Basic Course Information		
<ul style="list-style-type: none">• Academic Year/level: first part MSc, Forensic medicine and Toxicology	<ul style="list-style-type: none">• Course Title: course specification in Forensic Pathology	<ul style="list-style-type: none">• Code : FT200
<ul style="list-style-type: none">• Number of teaching hours:<ul style="list-style-type: none">- Lectures: 2 hours/week- Practical: 3 hours/week		
2-Overall Aims of the course	<i>By the end of the course the postgraduate student must be able to:</i> 1- Competently perform examination of organs by naked eye & microscopically for forensic pathology.	
3-Intended learning outcomes of course (ILOs): <i>Upon completion of the course, the postgraduate student should be able to:</i>		
A. Knowledge and Understanding	a.1 Explain various aspects of detection of the pathology in different systems.	

	<p>a.2 Identify his/her medical knowledge in the service of law with emphasis on gross and microscopic assessment of different pathology.</p> <p>a.3 Explain medicolegal aspects of presence of pathology as a cause of death and distinguish it from other induced causes of death and histopathological aspects of blood.</p> <p>a.4 Compare histopathological aspects of different cases misinterpret as a pathological cases.</p> <p>a.5 Explain cardiovascular diseases and their pathology from medicolegal aspects.</p> <p>a.6 Tell scientific development in the field of forensic pathology.</p> <p>a.7 Describe the mutual influence between professional practice and its impacts on the environment.</p> <p>a.8 Identify the ethical and legal principles of professional practice in the field of forensic pathology.</p> <p>a.9 Identify the principles of quality in professional practice in the field of forensic pathology.</p> <p>a.10 Illustrate histopathology of female genital organ diseases.</p> <p>a.11 Identify the basics and ethics of scientific research.</p> <p>a.12 Recognize the recent developments in common problems related to the field of forensic pathology.</p>
<p>B. Intellectual Skills</p>	<p>b.1 Interpret different problems in detection of pathological elements with traumatic evidence.</p> <p>b.2 Classify different mixed pathological and traumatic/ wound cases and how to create a report for each case and how to deal with it.</p>

	<p>b.3 Assess common ethical dilemma and suggest a proper solution.</p> <p>b.4 Interpret between knowledge for Professional problems' solving.</p> <p>b.5 Classify risk in professional practices in the field of forensic pathology.</p> <p>b.6 Define a research study and / or create a scientific study on a research problem.</p> <p>b.7 Survey for the development of performance in the field of forensic pathology.</p> <p>b.8 Assess researches and issues related to forensic pathology.</p>
<p>C. Professional and Practical Skills</p>	<p>c.1 Identify living and dead individuals presented with pathological conditions.</p> <p>c.2 Imitate pathological death by different clinical and investigatory methods.</p> <p>c.3 Recognize pathological findings for different systematic diseases.</p> <p>c.4 Define healthy and diseased organs.</p> <p>c.5 Organize a different information about different diseases.</p> <p>c.6 Recognize a preliminary test for pathological conditions from histopathological examination of various organs.</p> <p>c.7 Name different elements and special signs to distinguish pathology from other traumatic elements and write pathological reports.</p>
<p>D. General and transferable Skills</p>	<p>d.1 Plan database to collect material needed for research.</p>

	<p>d.2 Connect and work in material from various sources (including library, electronic and online resources).</p> <p>d.3 Classify working in a research assignment orally and deliver it in both written and electronic forms.</p> <p>d.4 Illustrate ethical behavior to all examined patients irrespective of their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture about the method that used for detection of pathology.</p> <p>d.5 Arrange management of examination problems.</p> <p>d.6 Connect effectively with other professionals to maximize patient benefits and minimize risk of errors.</p> <p>d.7 Identify Life -long learning of the importance of life-long self-learning and show a strong commitment to it.</p> <p>d.8 Recognize how to work in and effectively deal with unethical behavior of other members of your team.</p>
--	--

4- Course Contents

Course title	Total hrs	No. of hrs		Program ILOs covered
		L	P	
Forensic pathology				
I- General pathology.	20	8	12	a2, b2, c4
II- Vascular system.	13	5	8	a2, b2, c4
III- Cardiovascular system.	17	7	10	a2, b2, c4
IV- Respiratory system.	15	6	9	a2, b2, c4
V- Gastrointestinal system.	14	6	8	a2, b2, c4
VI- Renal system	16	6	10	a2, b2, c4
VII- Female genital system.	9	4	5	a2, b2, c4

VIII- Central nervous system.	16	6	10	a2, b2, c4
-------------------------------	----	---	----	------------

5-Teaching and Learning Methods	<p>5.1- Lectures: live, online, and pre-recorded video lectures</p> <p>5.2- Practical lessons.</p> <p>5.3- Seminars.</p> <p>5.4- Searches in computers (assignments).</p> <p>5.5- Movie based learning</p>
<p>6- Student Assessment Methods</p> <p>- Assessment Schedule (Timing of Each Method of Assessment)</p>	<p>6. 1- log book</p> <p>6.2- Written exams: Short essay: to assess knowledge Problem solving: to Asses intellectual skills MCQ: to assess knowledge and intellectual skills</p> <p>6.3- Practical Exams (OSPE): to assess practical and professional skills</p> <p>6.4- Oral Exams: to assess knowledge, understanding, attitude, and communication.</p> <p>Assessment 1: Final written exam week:24-28 Assessment 2: Oral exam week:24-28 Assessment 3: Practical exam week:24-28</p>

7-Weighting of assessments

Written exam	20
Oral exam	15
Practical examination	15
Total	50

8- List of references

8.1- Course notes: - Department Books, and notes.
-Logbook

8.2- Essential books (textbooks)

Guy Orchard & Brian Nation (2011): Histopathology (Fundamentals of Biomedical Science), (1st ed.), Oxford University Press. ISBN: 9780199574346.

Reinhard B Dettmeyer (2011): Forensic Histopathology (fundamentals and perspective). ISBN 978-3-642-20658.

8.3- Periodicals:

Indian Journal of Forensic Medicine and Pathology

American Journal of Forensic Pathology

8.4-EssentialBooks:

David T. Rowlands (1986): Human Pathology: An Introduction to the Study of Disease, Macmillan Pub Co. ISBN: 9780071053082.

Vincent J. DiMaio & D. Kimberly Mlina (2021): DiMaio Forensic Pathology (practical aspects of criminal and forensic investigations). 3rd ed. CRC press ISBN- 13:978-0367251485.

8.5-WebSites:

www.medscape.com/pathologyhome.

www.pathology.com

9- Facilities required for teaching and learning

1. Forensic Medicine and Clinical Toxicology research laboratory equipped with skill tools.
2. Classrooms for theoretical lectures and tutorials.

Course coordinators:

Prof. Dr. Manal Abdel-Aziz

Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr. / Irene Atef Fawzy



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

Course Specifications of Forensic Pathology in MSC of forensic medicine & toxicology	مسمى المقرر
FT200	كود المقرر

نموذج رقم (١١) (أ)

جامعة/أكاديمية :المنيا.....

كلية / معهد :الطب البشري.....

قسم:الطب الشرعي
والسموم.الكلينكية.....

A- Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics) Forensic Pathology	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
I- General pathology.	A2-12	B2	C4	D1-8
II- Vascular system.	A2-11	B3-8	C3-4-7	D2-6
III- Cardiovascular system.	A2-3-10	B3-4-6	C1-2-6	D3-7
IV- Respiratory system.	A2-4	B2-5-7		
V- Gastrointestinal system.	A2-4-5-7	B3-4	C3-5	D2-4-5
VI- Renal system	A2-3-4-8-9	B1-3		
VII- Female genital system.	A1-10-11	B1-2		
VIII- Central nervous system.	A1-3-5-8	B3-5		

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

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 A7 A8 A9 A10 A11 A12	B1 B2 B3 B4 B5 B6 B7 B8	-	-
Practical	-	-	C1, C2, C3, C4, C5, C6, C7	-
Presentation/seminar	-	-	-	D1,D2,D3,D4 ,D5,D6,D7,D 8
Journal club	-	-	-	D1,D4,D5,D6 ,D8
Thesis discussion	-	-	-	D1,D2,D3,D4 ,D5,D6,D7,D 8
Training courses & workshops	-	-	-	D1,D2,D3,D4 ,D5,D6,D7,D 8

Movie based learning	-	-	-	D1,D2,D3,D4 ,D5,D6
-----------------------------	---	---	---	-------------------------------

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

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, A9, A10, A11, A12	B, B2, B3, B4, B5, B6, B7, B8	-	-
Practical exam	-	-	C1, C2, C3, C4, C5, C6, C7	-
Oral Exam	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12	B, B2, B3, B4, B5, B6, B7, B8	-	-

Course coordinators:

Prof. Dr. Manal Abdel-Aziz
Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr. / Irene Atef Fawzy

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

Course Specifications of Human Anatomy and Embryology in Master of Forensic medicine and Toxicology (First part) 2022-2023

University: Minia

Faculty: Medicine

Department offering the course: Human Anatomy and Embryology department.

Course Specifications

It is a part of Postgraduate (MSC) Program for Forensic medicine and Clinical Toxicology Department.

Programme(s) on which the course is given: First part MSC of Forensic medicine and Toxicology

Major or minor element of programs: Anatomy.

1-Course Information		
<ul style="list-style-type: none">• Academic Year/level: first part MSc, Forensic medicine and Toxicology	<ul style="list-style-type: none">• Course Title: Human Anatomy and Embryology	<ul style="list-style-type: none">• Code: FT200
<ul style="list-style-type: none">• Number of teaching hours:<ul style="list-style-type: none">- Lectures: 2 hours/week- Practical: 3 hours/week		
2-Overall Aims of the course	<i>By the end of the course the candidate must be able to:</i> 1- Scientific knowledge essential for the practice of forensic medicine & toxicology according to the international standards. 2- Basic skills necessary for dealing with different medical aspects of living & dead individuals; and proper management (diagnosis and treatment) of intoxicated patients. 3- Provision of sound ethical principles related to medical practice.	

	<p>4- Active participation in community needs assessment and problems solving.</p> <p>5- Developing learning abilities necessary for continuous medical education.</p> <p>6- Upgrading research interest and abilities.</p>
<p>3-Intended learning outcomes of course (ILOs):</p> <p><i>Upon completion of the course, the student should be able to:</i></p>	
<p>A. Knowledge and Understanding</p>	<p>a.1 Identify the basics of human anatomy and Embryology.</p> <p>a.2 Identify the basics of anatomy bone.</p> <p>a.3 Define different classes of congenital abnormalities.</p> <p>a.4 State the parameters of age determination</p> <p>a.5 Describe indices of maturity and different body organs on change with age</p>
<p>B. Intellectual Skills</p>	<p>b.1 Assess common ethical dilemma and suggest a proper solution.</p> <p>b.2 Interpret between knowledge for Professional problems' solving.</p> <p>b.3 Recognize a research study and / or create a scientific study on a research problem.</p> <p>b.4 Recognize for the development of performance in the field of human anatomy and embryology.</p> <p>b.5 Assess researches and issues related to human anatomy and embryology.</p>
<p>C. Professional and Practical Skills</p>	<p>c.1 Recognize anatomical overview of bones.</p>

<p>D. General and transferable Skills</p>	<p>d.1 Adapt database to collect material needed for research.</p> <p>d.2 Connect and working in material from various sources (including library, electronic and online resources).</p> <p>d.3 Classify working in a research assignment orally and deliver it in both written and electronic forms.</p> <p>d.4 Define Ethical behavior to all patients irrespective of their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient’s culture.</p> <p>d.5 Apply management of medicolegal problems.</p> <p>d.6 Connect effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.</p> <p>d.7 Modify Life -long learning of the importance of life-long self-learning and show a strong commitment to it.</p> <p>d.8 Recognize to working in and effectively deal with unethical behavior of other members of healthcare team.</p>
--	---

4. Course Contents

Course title	Total hrs.	No. of hrs.	
		L	P
Human Anatomy and Embryology:			
I- Stages of growth.	20	8	12
II- Indication of maturity.	13	5	8
III- Methodology of study of growth.	13	5	8
IV- Teething.	14	6	8

V-	Senility.	18	8	10
VI-	Factors affecting growth.	16	6	10
VII-	Dactylography.	10	4	6
VIII-	Surface anatomy of heart, liver, spleen, lung, big vessels.	16	6	10

5-Teaching and Learning Methods	<ul style="list-style-type: none"> • Lectures • Practical {skill lab, cadavers, plastinated and plastic models: instructor guided} • Presentation/seminar • Group discussion
6-Student Assessment Methods - Assessment Schedule (Timing of Each Method of Assessment)	<p>१- written exam: paper based exams १ paper for 1st part exam Short assay: to assess Knowledge, understanding Problem solving: asses intellectual skills Multiple choice: assess Knowledge, understanding and intellectual skills Periodic quizzes: assess Knowledge, understanding and intellectual skills</p> <p>२- Practical exams (skill lab exams): to assess practical skills as well as intellectual skills.</p> <p>३- Oral exam: to assess understanding, intellectual skills and transferrable.</p> <p>Assessment 1 ... Final practical exam (skill lab exams) Week: 24-28 Assessment 2.... Final written exam (paper based exam). Week : 24-28 Assessment 3.....Final oral exam Week: 24-28</p>
7-Weighting of Each Method of Assessment	<p>Written exam (paper based exam) 20</p> <p>Oral exam 15</p> <p>Practical examination 15</p>

	Total	50
8. List of References		
A. Course Notes/handouts	- Department Books, and notes. - Logbook	
B. Essential Books	Standing S. (2015): Gray's Anatomy: The Anatomical Basis of Clinical Practice (41st ed.). London, England: Elsevier. ISBN: 9780702052309.	
C. Recommended Text Books	Standing S. (2015): Gray's Anatomy: The Anatomical Basis of Clinical Practice (41st ed.). London, England: Elsevier. ISBN: 9780702052309.	
D. Periodicals, websites	1. http://www.ncbi.nlm.gov/ 2. http://www.vlib.org/	

9- Facilities required for teaching and learning

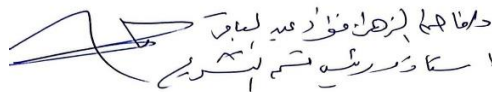
1. Anatomy and Embryology laboratory equipped with skill tools.
2. Classrooms for theoretical lectures and tutorials.

Course coordinators:

Prof. Dr. Mohammed Ahmed Desouky

Prof. Dr. Fatma El-zahraa Fouad

Head of Department:



Prof. Dr. Fatma El-zahraa Fouad

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

Course Specifications of Human Anatomy and Embryology in MSC of forensic medicine & toxicology	مسمى المقرر
AN200	كود المقرر

جامعة/أكاديمية :المنيا.....
كلية / معهد:الطب البشري.....
قسم:الطب الشرعي.....
والسموم.الكلينكية.....

A- Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics) Human Anatomy and Embryology	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General and transferable skills
	A	B	C	D
I- Stages of growth.	A1-2-3-4	B1,2	C1	D1-8
II- Indication of maturity.	A2-5	B3	C1	D2-7
III- Methodology of study of growth.	A2-3	B3-4	C1	D3-6
IV- Teething.	A1-2-4-5	B3-4	C1	D2-4-5
V- Senility.	A2-3-5	B1-2	C1	D4-8
VI- Factors affecting growth.	A1-3	B1-2	C1	D2-7
VII- Dactylography.	A1-4	B3-5	C1	D3-5

VIII- Surface anatomy of heart, liver, spleen, lung, big vessels.	A2-5	B3-4	C1	D1-3
---	-------------	-------------	-----------	-------------

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

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	B1-2-3-4-5	-	-
Practical	-	-	C1	-
Presentation/seminar	-	-	-	D1,D2,D3,D4,D5,D6, D7,D8
Journal club	-	-	-	-
Thesis discussion	-	-	-	-
Training courses & workshops	-	-	-	D1,D2,D3,D4,D5,D6, D7,D8

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

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	B1, B2, B3, B4, B5	-	-
Practical exam	-	-	C1	-
Oral Exam	A1, A2, A3	B1, B2, B3, B4, B5	-	-

Course coordinators:

Prof. Dr. Mohammed Ahmed Desouky

Prof. Dr. Fatma El-zahraa Fouad

Head of Department:

Prof. Dr. Fatma El-zahraa Fouad

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

Course Specification of Medical Ethics

Master degree of Forensic Medicine & Toxicology (2022-2023)

University: Minia University

Faculty: Faculty of Medicine

Program on which the course is given: Master degree of Forensic Medicine & Toxicology

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

Department offering the program: Forensic Medicine & Clinical Toxicology Department

Department offering the course: Forensic Medicine & Clinical Toxicology Department

A. Basic Information		
<ul style="list-style-type: none">Academic Year/level: Post graduate; 1st Part MSC, Forensic Medicine & Toxicology	<ul style="list-style-type: none">Course Title: Course Specification of Medical Ethics (Master degree of Forensic Medicine & Toxicology)	<ul style="list-style-type: none">Code: FT 200
<ul style="list-style-type: none">Number of teaching hours:<ul style="list-style-type: none">Lectures: Total of 30 hours; 3 hour/weekPractical: 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.	

	<p>A.4- Recognize an integrated approach to deal with 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

TOPIC	Lecture Hours	Practical Hours	Total hours
Medical Responsibility and Duties of the physician	2	1	3
Medicolegal aspect of cloning	2	1	3
Defensive Medicine	2	1	3
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.) 2/W	(15 hr.) 1/W	(45 hr.) 3/W

4- Teaching and Learning Methods	4.1 - Straight lectures; power point presentations 4.2 - Practical lessons 4.3 - Brain storming with the students 4.4 - Questions and Answers 4.5- Movie based learning
5- Teaching and Learning Methods to students with limited Capacity	(Not applicable)
6- Student Assessment	
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.</p> <p>*Oral exam; to asses knowledge and understanding. Also intellectual skills, attitude, and communication.</p> <p>*Practical exam (OSPE): 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	<ul style="list-style-type: none"> • 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
---	---

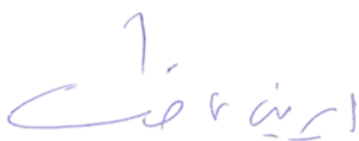
Course Coordinators:

Prof. Dr. Morid Malak Hanna

Dr. Mennatallah Mahmoud Ahmed

Head of Department:

Prof. Dr. Irene Atef Fawzy



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

Course Specification of Medical Ethics	مسمى المقرر
Master degree of Forensic Medicine & Toxicology (First part))	
	كود المقرر

جامعة/أكاديمية :المنيا.....
كلية / معهد:الطب البشرى.....
قسم:الطب الشرعى والسموم
الأكلينية.....

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

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

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
Movie based learning	-	-	-	D1,2,3,4,5

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

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	-	-

Course Coordinators:

Prof. Dr. Morid Malak Hanna

Dr. Mennatallah Mahmoud Ahmed

Head of Department:

Prof. Dr. Irene Atef Fawzy



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

Course Specifications of Forensic Medicine and Injuries & infirmity

In master degree of forensic medicine and toxicology (second part) 2022-2023

University: Minia University

Faculty: Faculty of Medicine

Department offering the course: Forensic Medicine & Clinical Toxicology department.

Course Specifications

It is a part of Postgraduate (MSc) Programme for Forensic Medicine & Clinical Toxicology Department.

Programme(s) on which the course is given: Second part MSc of forensic medicine and toxicology

Major or minor element of programmes: Forensic Medicine, Infirmity.

1- Basic Course Information		
<ul style="list-style-type: none">• Academic Year/level: second part MSc, forensic medicine and toxicology	<ul style="list-style-type: none">• Course Title: course specification in Forensic Medicine and Injuries & infirmity	<ul style="list-style-type: none">• Code : FT200
<ul style="list-style-type: none">• Number of teaching hours:<ul style="list-style-type: none">- Lectures: 8 hours/week- Practical: 8 hours/week- Clinical training in the administration of forensic medicine: 2 hours/week		
2-Overall Aims of the course	<i>By the end of the course the candidate must be able to:</i> 1- Scientific knowledge essential for the practice of forensic medicine & toxicology according to the international standards. 2- Basic skills necessary for dealing with different medical aspects of living & dead individuals; and proper	

	<p>management (diagnosis and treatment) of intoxicated patients.</p> <p>3- Provision of sound ethical principles related to medical practice.</p> <p>4- Active participation in community needs assessment and problems solving.</p> <p>5- Developing learning abilities necessary for continuous medical education.</p> <p>6- Upgrading research interest and abilities.</p>
<p>3-Intended learning outcomes of course (ILOs):</p> <p><i>Upon completion of the course, the postgraduate student should be able to:</i></p>	
<p>A. Knowledge and Understanding</p>	<p>a.1 Explain various medicolegal aspects of malpractice & ethics.</p> <p>a.2 Identify his/her medical knowledge in the service of law with emphasis on medicolegal aspects of medical practice.</p> <p>a.3 Explain medicolegal aspects of blood grouping and DNA in forensic field.</p> <p>a.4 Explain medicolegal aspects of different cases of sexual offences.</p> <p>a.5 Explain maternal and infant morbidity and mortality from medicolegal aspects.</p> <p>a.6 Tell scientific development in the field of forensic medicine.</p> <p>a.7 Tell the mutual influence between professional practice and its impacts on the environment.</p>

	<p>a.8 Identify the ethical and legal principles of professional practice in the field of forensic medicine.</p> <p>a.9 Explain the principles of quality in professional practice in the field of forensic medicine.</p> <p>a.10 Explain medicolegal aspects of identification of both live & dead person.</p> <p>a.11 Define the basics and ethics of scientific research.</p> <p>a.12 Define and recent developments in common problems related to the field of forensic medicine.</p>
<p>B. Intellectual Skills</p>	<p>b.1 Classify different problems of malpractices.</p> <p>b.2 Recognize different traumatic/ wound cases and how to create a report for each case and how to deal with it.</p> <p>b.3 Assess common ethical dilemma and suggest a proper solution.</p> <p>b.4 Interpret between knowledge for Professional problems' solving.</p> <p>b.5 Apply knowledge for professional problems solving in the field of forensic medicine.</p> <p>b.6 Design a research study and / or create a scientific study on a research problem.</p> <p>b.7 Recognize for the development of performance in the field of forensic medicine.</p>

	<p>b.8 Assess researches and issues related to forensic medicine.</p>
<p>C. Professional and Practical Skills</p>	<p>c.1 Define living and dead individuals.</p> <p>c.2 Imitate death by different clinical and investigatory methods.</p> <p>c.3 Define time pass since death through assessment of Postmortem changes.</p> <p>c.4 Observe different wounds and injuries.</p> <p>c.5 Organize a proper primary report.</p> <p>c.6 Recognize a preliminary test for blood grouping.</p> <p>c.7 Write Forensic reports.</p>
<p>D. General and transferable Skills</p>	<p>d.1 Adapt database to collect material needed for research.</p> <p>d.2 Connect and working in material from various sources (including library, electronic and online resources).</p> <p>d.3 Classify working in a research assignment orally and deliver it in both written and electronic forms.</p> <p>d.4 Modify Ethical behavior to all patients irrespective of their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture.</p> <p>d.5 Plan management of medicolegal problems.</p> <p>d.6 Connect effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.</p>

	<p>d.7 Recognize Life -long learning of the importance of life-long self-learning and show a strong commitment to it.</p> <p>d.8 Recognize to working in and effectively deal with unethical behavior of other members of healthcare team.</p>
--	--

4. Course Contents

Course title Forensic medicine	Total hrs	No. of hrs		Program ILOs covered
		L	P	
Identification: <ul style="list-style-type: none"> - Identification of dead body. - Identification of living person. - Identification of collection of bones 	20 20 20	10 10 10	10 10 10	a15,c1,b6
Thanatology: <ul style="list-style-type: none"> - Death. - Postmortum changes. - Time passed since death. 	30 16 16	15 8 8	15 8 8	a5, c1, c2,c3
Wounds:	60	30	30	b2,c4,c5
Injuries of special organs	32	16	16	b2,c4,c5
Head injuries:	30	15	15	b2,c4,c5
Firearm injuries: <ul style="list-style-type: none"> - Types of weapons. 	30	15	15	b2,c4,c5

- Characters of firearm injuries.	30	15	15	
- Medicolegal aspect of firearm injuries	30	15	15	
Asphyxia:				b2,c4,c5
- General aspects.	16	8	8	
- Drowning.	20	10	10	
- Smothering.	10	5	5	
- Hanging.	10	5	5	
- Strangulation.	10	5	5	
- Chocking.	10	5	5	
- Crush asphyxia.	10	5	5	
Sexual offences:	32	16	16	a4,
Infanticide:	20	10	10	a5
Child abuse:	20	10	10	a5
Domestic violence	40	20	20	a5
Injuries from mechanical violence.	30	15	15	b2,c4,c5
Road traffic accidents.	30	15	15	b2,c4,c5
Thermal injuries:				b2,c4,c5
- Burns, scald, & corrosives.	30	15	15	
- Electrocution.	30	15	15	
- Radiation.	20	10	10	
DNA typing & its application in forensic field:	40	20	20	a3,
Blood stains	20	10	10	a3,c6

Cloning	20	10	10	a3,
Sterility & artificial insemination	20	10	10	a4,
Negative autopsy	20	10	10	a5, c1, c3
Medical ethics	20	10	10	a1,a2.a12,a13,b1,b4
Forensic Odontology	8	4	4	a2, a11, a12, a15
Forensic Radiology	8	4	4	a2, a11, c1, d6
Virtual autopsy	4	2	2	a2, a11, a15, c2, c3

5-Teaching and Learning Methods	<p>5.1- Lectures: live, online, and pre-recorded video lectures</p> <p>5.2- Practical lessons.</p> <p>5.3- Seminars.</p> <p>5.4- Searches in computers (assignments).</p> <p>5.5- Movie based learning</p>
--	--

6- Student assessment methods

6. 1- log book

6.2- **Written exams:**

Short essay: to assess knowledge

Problem solving: to Asses intellectual skills

MCQ: to assess knowledge and intellectual skills

6.3- **Practical Exams (OSPE):** to assess practical and professional skills

6.4- **Oral Exams:** to assess knowledge, understanding, attitude, and communication.

6.5- **Clinical exam in the morgue and write forensic report:** to assess practical and professional skills

- Assessment Schedule (Timing of Each Method of Assessment)

Assessment 1: Final written exam week: 72-76

Assessment 2: Oral exam week: 72-76

Assessment 3: Practical and Clinical exams and Forensic report exam week: 72-76

7-Weighting of assessments

Written exam	280
--------------	-----

Oral exam	170
Practical examination	90
Clinical examination for injuries and infirmity	80
Forensic report exam	80
Total	700

8- List of references

8.1- Course notes: - Department Books, and notes.
-Logbook

8.2- Essential books (textbooks)

Pekka Saukko & Bernard Knight (2015): Knight's Forensic Pathology, (4th ed.), CRC Press, 680 pages. ISBN: 9780340972533.

8.3- Periodicals:

Findarticle.com

Freemedicaljournals.com

8.4-EssentialBooks:

Pekka Saukko & Bernard Knight (2015): Knight's Forensic Pathology, (4th ed.), CRC Press, 680 pages. ISBN: 9780340972533.

8.5-WebSites:

1. <http://www.ncbi.nlm.gov/>
2. <http://www.vlib.org/>
3. www.genome.ad.jp/kegg/regulation.

9- Facilities required for teaching and learning

1. Forensic Medicine and Clinical Toxicology research laboratory equipped with skill tools.
2. Classrooms for theoretical lectures and tutorials.

Course coordinators:

Prof. Dr. Manal Abdel-Aziz

Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr. / Irene Atef Fawzy



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

Course Specifications of forensic medicine and Injuries & Infirmary in MSC of forensic medicine & toxicology	مسمى المقرر
FT200	كود المقرر

نموذج رقم (١١ أ)

جامعة/أكاديمية :المنيا.....

كلية / معهد:الطب البشري.....

قسم:الطب الشرعي والسموم.الكلينكية.....

A- Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics) Forensic Medicine	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D

Identification	A1-11-12	B1-2-3	C1-2-3	D1-2
Identification of dead body				
Identification of living person				
Identification of collection of bones				
Thanatology	A1-3-9-10			
Death				
Postmortem changes				
Time passed since death		B1-2-3	C1-2-3	D1
Wounds	A1-2			D1-2-3
Injuries of special organs	A1-2-3-4-12			D2-4
Head injuries	A2-5-6-11	B1-2-3	C1-2-3	
Firearm injuries	A2-4-5-7-8	B3-4	C1-2-3-5	D2-5-6
Types of weapons		B2-4		
Characters of firearm injuries		B4-5		
Medicolegal aspect of firearm injuries		B1-2		D1-2-3-7
Asphyxia	A2-4-6-7-8	B1-2		
General aspects		B2-3	C1-2-3-7	
Drowning		B2-3	C1-2-3	D2-4
Smothering		B2-3		
Hanging	A1-2-3-4-5	B2-4		
Strangulation	A1-3-4-5-6-8-9			
Chocking	A1-3-5-7		C1-2-3-7	D2-3-4
Crush asphyxia	A1-2-3			

Sexual offences	A15-6-7-8-10		C1-2-3	
Infanticide	A1-2-3-5		C1-2-3	D1-2-3
Child abuse	A1-2-3-4-5			
Domestic violence	A1-4-6-7-8			D2-3-4-5-6
Injuries from mechanical violence	A2-3-4-7-8		C1-2-3-4	
Road traffic accidents	A2-4-5-8-9	B2-4-5		
Thermal injuries	A2-8-9	B2-4-5		D1-2-8
Burns, scald, & corrosives	A1-2-5-7-8	B2-4-5-6		
Electrocution	A1-3-4-8	B3-4-5		
Radiation	A1-2-3-11-12	B3-4		
DNA typing & its application in forensic field	A1-9	B3-4		
Blood stains	A2-3-4-6			D1-3-5
Cloning	A2-3-4-5-6	B3-4-5	C1-2	D1-3
Sterility & artificial insemination	A4-5-6-7-10	B3-4		
Negative autopsy	A1-2-4-9	B3-4-5	C3-4	D2-3-4-6
Medical ethics	A1-6-7-8-9	B1-2-3-8	C1-2	D2-4
Forensic Odontology	A1-4-6-7	B2-3-4	C1-2-3	D1-3-7
Forensic Radiology	A2-3-5-6	B4-5-7		
Virtual autopsy	A3-4-5-9	B3-4-5		D2-3-4
	A1-2-3	B4-5	C1-2	D2-4

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

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 A7 A8 A9 A10 A11 A12	B1 B2 B3 B4 B5 B6 B7 B8	-	-
Practical	-	-	C1 C2 C3 C4 C5 C6 C7	-
Presentation/seminar	-	-	-	D1,D2,D3,D4,D5,D 6,D7,D8
Journal club	-	-	-	D1,D2,D6,D7,D8
Thesis discussion	-	-	-	D1,D2,D3,D4,D5,D 6,D7,D8
Training courses & workshops	-	-	-	D1,D2,D3,D4,D5,D 6,D7,D8
Movie based learning	-	-	-	D1,D2,D3,D4,D5,D 6

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

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

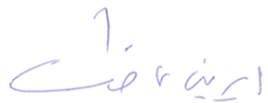
Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12	B1, B2, B3, B4, B5, B6, B7, B8	-	-
Practical exam	-	-	C1, C2, C3, C4, C5, C6, C7	-
Oral Exam	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12	B1, B2, B3, B4, B5, B6, B7, B8	-	-

Course coordinators:

Prof. Dr. Manal Abdel-Aziz
Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr. / Irene Atef Fawzy



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

Matrix of GARS versus ARS

Forensic Medicine & Toxicology Master Degree

GARS	ARS
<p><u>a- Knowledge and understanding</u></p> <p>a.1 Theories and basics related to the learning field as well as in related areas.</p> <p>a.2 Mutual influence between professional practice in pathology and its impact on the environment.</p> <p>a.3 Main scientific advances & developments in forensic medicine.</p> <p>a.4 Ethical and medico-legal principles of professional practice in forensic medicine.</p> <p>a.5 Principles and the basics of quality in professional practice in forensic medicine.</p> <p>a.6 Basics and ethics of scientific research.</p>	<p><u>a- Knowledge and understanding</u></p> <p>a.1. Demonstrate competency and mastery of basics, methods and tools of scientific research and medical audit in forensic medicine.</p> <p>a.2. Have continuous ability to add knowledge new developments in forensic medicine through research and publication.</p> <p>a.3. Appraise and utilize scientific knowledge to continuously update and improve practical skills.</p> <p>a.4. Acquire excellent level of medical knowledge in the basic biomedical, related clinical, behavioral and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in practical skills and scientific research.</p> <p>a.5. Demonstrate & acquire an in-depth understanding of common areas / problems and recent advances in the field of specialty.</p>
<p><u>b. Intellectual skills</u></p> <p>b.1 Analyze and evaluate relevant information and correlate them to solve problems in the area of forensic medicine.</p> <p>b.2 Solve special problems even in absence of some data.</p>	<p><u>b. Intellectual skills</u></p> <p>b.1. Possess excellent level of a wide range of professional skills to manage independently all problems in the areas of forensic medicine.</p> <p>b.2. Demonstrate positive approach and participate in updating and improving Procedures, methods & approaches of professional practice in forensic medicine.</p>

<p>b.3 Correlate different knowledge to solve problems in forensic medicine professionally.</p> <p>b.4 Conduct a scientific research study and / or write a scientific systemic study on a research problem.</p> <p>b.5 Assess risk in professional practices in the area of forensic medicine.</p> <p>b.6 Plan for the development of professional performance in the area of forensic medicine.</p> <p>b.7 Be able of decision-making in a variety of professional situations.</p>	<p>b.3. Use recent technologies to improve his practice in forensic medicine.</p> <p>b.4. Demonstrate leadership competencies including inter-personal and communication skills that ensure effective information exchange with individual patients and their families and team-work with other health professions, the scientific community and the public.</p> <p>b.5. Function as a team leader to provide appropriate, effective and compassionate reaction when dealing with problems related to forensic medicine and other health professions.</p> <p>b.6. Master decision making capabilities according to available data & information and in different situations related to forensic medicine.</p> <p>b.7. Possess capabilities of efficient management, employment, improvement of available resources as well as finding new resources.</p> <p>b.8. Demonstrate in depth awareness of public health and related health policy issues including independent ability to improve health care, and identify and carry out system-based improvement of care.</p>
<p><u>c. professional and practical skills</u></p> <p>c.1 Master the basic & modern professional skills in forensic medicine.</p> <p>c.2 Write and evaluate/comment on professional reports.</p> <p>c.3 Evaluate & demonstrate relevant skills of existing methods and tools in the area of forensic medicine.</p>	<p><u>c. professional and practical skills</u></p> <p>c.1. Master decision making capabilities according to available data & information and in different situations related to clinical toxicology.</p> <p>c.2. Possess capabilities of efficient management, employment, improvement of</p>

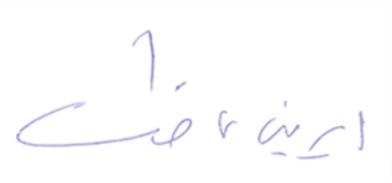
	available resources as well as finding new resources.
<p><u>d. General and Transferable skills</u></p> <p>d.1 Demonstrate effective communication skills in its different forms.</p> <p>d.2 Use information technology to serve the professional practice.</p> <p>d.3 Demonstrate skills of self-assessment and identify personal learning needs.</p> <p>d.4 Use different sources to get information and knowledge.</p> <p>d.5 Develop rules and indicators for appraisal of others.</p> <p>d.6 Work in a team, and demonstrate leadership of teams in various professional contexts.</p> <p>d.7 Manage time efficiently.</p> <p>d.8 Demonstrate skills of self-learning and continuous learning.</p>	<p><u>d. General and Transferable skills</u></p> <p>d.1. Demonstrate leadership responsiveness to the larger context of the related health care system, including the organization, partnership with health care providers and managers, and resource allocations.</p> <p>d.2. Demonstrate in depth awareness of public health and related health policy issues including independent ability to improve health care, and identify and carry out system-based improvement of care.</p> <p>d.3. Show model attitudes and Professionalism.</p> <p>d.4. Demonstrate commitment for life-long learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages and in the area of specialty or its subspecialties.</p>

Program coordinators:

Prof. Dr. Manal Abdel-Aziz
Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr. / Irene Atef Fawzy



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

Matrix ARS versus program ILOs

Forensic Medicine & Toxicology Master Degree

IOLS	ARS
<p><u>a- Knowledge and understanding</u></p> <p>a.1 Explain various medicolegal aspects of malpractice & ethics.</p> <p>a.2 Recognize his/her medical knowledge in the service of law with emphasis on medicolegal aspects of medical practice.</p> <p>a.3 Explain medicolegal aspects of blood grouping and DNA in forensic field.</p> <p>a.4 Explain medicolegal aspects of different cases of sexual offences.</p> <p>a.5 Explain maternal and infant morbidity and mortality from medicolegal aspects.</p> <p>a.6 Define the basics of general toxicology.</p> <p>a.7 Define the basics of systemic toxicology.</p> <p>a.8 Define the basics of specific toxicology.</p> <p>a.9 Describe different classes of common toxic substances and environmental pollution and how to eliminate toxin from body.</p> <p>a.10 Explain different groups of toxic substances and drugs and its</p>	<p><u>a- Knowledge and understanding</u></p> <p>a.1. Demonstrate competency and mastery of basics, methods and tools of scientific research and medical audit in forensic medicine.</p> <p>a.2. Have continuous ability to add knowledge new developments in forensic medicine through research and publication.</p> <p>a.3. Appraise and utilize scientific knowledge to continuously update and improve practical skills.</p> <p>a.4. Acquire excellent level of medical knowledge in the basic biomedical, related clinical, behavioral and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in practical skills and scientific research.</p> <p>a.5. Demonstrate & acquire an in-depth understanding of common areas / problems and recent advances in the field of specialty.</p>

<p>differential diagnosis and how to do first aid measurements for each one.</p> <p>a.11 Tell scientific development in the field of forensic medicine & toxicology.</p> <p>a.12 Tell the mutual influence between professional practice and its impacts on the environment.</p> <p>a.13 Recognize the ethical and legal principles of professional practice in the field of forensic medicine.</p> <p>a.14 Explain the principles of quality in professional practice in the field of forensic medicine.</p> <p>a.15 Explain medicolegal aspects of identification of both live & dead person.</p> <p>a.16 Identify the basics and ethics of scientific research.</p> <p>a.17 Identify and recent developments in common problems related to the field of forensic medicine and clinical toxicology.</p>	
<p><u>b. Intellectual skills</u></p> <p>b.1 Classify different problems of malpractices.</p> <p>b.2 Recognize different traumatic/wound cases and how to create a report for each case and how to deal with it.</p>	<p><u>b. Intellectual skills</u></p> <p>b.2. Possess excellent level of a wide range of professional skills to manage independently all problems in the areas of forensic medicine.</p>

<p>b.3 Recognize different intoxicated patients and a treatment plan.</p> <p>b.4 Modify common ethical dilemma and suggest a proper solution.</p> <p>b.5 Interpret between knowledge for Professional problems' solving.</p> <p>b.6 Apply knowledge for professional practices in the field of forensic medicine.</p> <p>b.7 Design a research study and / or create a scientific study on a research problem.</p> <p>b.8 Plan for the development of performance in the field of forensic medicine.</p> <p>b.9 Recognize researches and issues related to forensic medicine.</p>	<p>b.3. Demonstrate positive approach and participate in updating and improving Procedures, methods & approaches of professional practice in forensic medicine.</p> <p>b.4. Use recent technologies to improve his practice in forensic medicine.</p> <p>b.5. Demonstrate leadership competencies including inter-personal and communication skills that ensure effective information exchange with individual patients and their families and team-work with other health professions, the scientific community and the public.</p> <p>b.6. Function as a team leader to provide appropriate, effective and compassionate reaction when dealing with problems related to forensic medicine and other health professions.</p> <p>b.7. Master decision making capabilities according to available data & information and in different situations related to forensic medicine.</p> <p>b.8. Possess capabilities of efficient management, employment, improvement of available resources as well as finding new resources.</p> <p>b.9. Demonstrate in depth awareness of public health and related health policy issues including independent ability to</p>
--	---

	<p>improve health care, and identify and carry out system-based improvement of care.</p>
<p><u>c. professional and practical skills</u></p> <p>c.1 Examine living and dead individuals.</p> <p>c.2 Classify death by different clinical and investigatory methods.</p> <p>c.3 Conclude time pass since death through assessment of Postmortem changes.</p> <p>c.4 Recognize different wounds and injuries.</p> <p>c.5 Apply a proper primary report.</p> <p>c.6 Recognize a preliminary test for blood grouping and toxicological screen.</p> <p>c.7 Modify Forensic reports.</p>	<p><u>c. professional and practical skills</u></p> <p>c.1. Master decision making capabilities according to available data & information and in different situations related to clinical toxicology.</p> <p>c.2. Possess capabilities of efficient management, employment, improvement of available resources as well as finding new resources</p>
<p><u>d. General and Transferable skills</u></p> <p>d.1 Design database to collect material needed for research.</p> <p>d.2 Develop and working in material from various sources (including library, electronic and online resources).</p>	<p><u>d. General and Transferable skills</u></p> <p>d.1. Demonstrate leadership responsiveness to the larger context of the related health care system, including the organization, partnership with health care providers and managers, and resource allocations.</p> <p>d.2. Demonstrate in depth awareness of public health and related health policy</p>

<p>d.3 Classify working in a research assignment orally and deliver it in both written and electronic forms.</p> <p>d.4 Recognize Ethical behaviour to all patients irrespective of their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture.</p> <p>d.5 Classify management of medicolegal problems.</p> <p>d.6 Collaborate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.</p> <p>d.7 Recognize the importance of Life - long learning of the importance of life-long self-learning and show a strong commitment to it.</p> <p>d.8 Develop a standard way to work in and effectively deal with unethical behaviour of other members of healthcare team.</p>	<p>issues including independent ability to improve health care, and identify and carry out system-based improvement of care.</p> <p>d.3. Show model attitudes and Professionalism.</p> <p>d.4. Demonstrate commitment for life-long learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages and in the area of specialty or its subspecialties.</p>
--	---

Program coordinators:

Prof. Dr. Manal Abdel-Aziz
Lecturer. Mennatallah Mahmoud Ahmed

Head of Department:

Professor Dr. / Irene Atef Fawzy



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