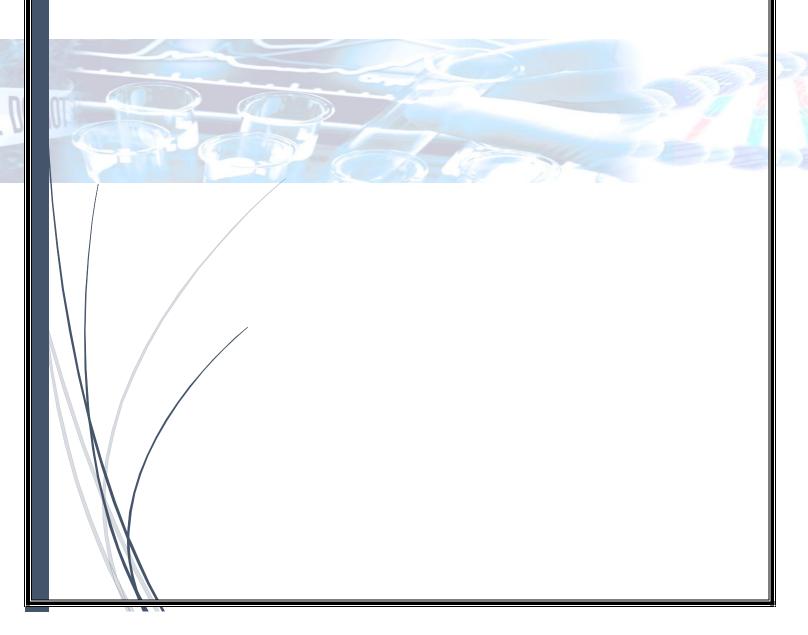


قسم الطب الشرعى و السموم الاكلينيكية



توصيف برنامج الماجستير





جامعة بنها كلية الطب البشرى قسم الطب الشرعى و السموم الأكلينيكية

# توصيف برنامج ماجستير الطب الشرعى و السموم الأكلينيكية 2022-2023

#### **Administrative information**

# \* معلومات أساسية:

ا ـ اسم البرنامج : Master of Science in Forensic Medicine & Toxicology

Single

٢ ـ طبيعة البرنامج:

٣- القسم المانح للدرجة: الطب الشرعى و السموم الأكلينيكية

- الأقسام المشتركة في البرنامج: طب المجتمع والبيئة والصناعات، الباثولوجيا، الأمراض الباطنة.
  - ٤- تاريخ إقرار البرنامج في مجلس القسم: 8 / 9 / 2022
  - ٥- تاريخ إقرار البرنامج في مجلس الكلية: 15 / 9 / 2022
  - ٦- منسق البرنامج Prof. / Abdelmonem G. Madboly
  - ٧- المراجة الداخلية للبرنامج:Prof. Dr. Atef A. Fauda
  - Prof. Dina Shokry; Professor of Forensic Medecine & : المراجع الخارجي. ^\
    Clinical Toxicology, Cairo University

#### **Professional information**

\* معلومات متخصصة:

١ - الأهداف العامة للبرنامج:

# 1- Overall Aims of the Program:

The overall aims of the program are:

1.1. To enable the postgraduate to apply the essential knowledge and skills in forensic medicine, clinical toxicology and their related





basic medical sciences during professional practice.

- 1.2. To accept the postgraduate the awareness of current medical issues in forensic medicine and clinical toxicology for proper analysis of forensic data in service of justice and for proper dealing with the intoxicated patient.
- 1.3. To provide the postgraduate with lifelong learning competencies necessary for continuous professional development.
- 1.4. To accept the postgraduate with principles of medical research in the field of forensic medicine and clinical toxicology.
- 1.5. To demonstrate interpersonal and communication skills that ensure effective information exchange with patients and their families colleagues, medical students and other health professions.
- 1.6. To acquire decision making capabilities in different situations related to forensic medicine and clinical toxicology.
- 1.7. To be aware of public health problems and health policy issues and share in system-based improvement of health care.
- 1.8. To show appropriate attitudes and professionalism.
- 1.9. To work as a member or a leader of a team for dealing with health problems and aid in health promotion.

١ - المخرجات التعليمية المستهدفة من البرنامج:

**2-Intended Learning Outcomes (ILOS):** 

2.a. Knowledge and Understanding

٢.أ ـ المعرفة والفهم:





#### On successful completion of the program, the candidate will be able to:

- **2.a.1.** List the medicolegal aspects of different disciplines of clinical forensic medicine and forensic pathology.
- 2.a.2. *Explain* the basics and principles of different branches of toxicology especially clinical, occupational, pediatric and forensic toxicology.
- 2.a.3. *Discuss* the different investigational methods used in the field of forensic chemistry and analytical toxicology.
- 2.a.4. *Illustrate* the basic medical physiological, biochemical and pharmacological basics related to the studied topics in forensic medicine and clinical toxicology.
- 2.a.5. *Explain* the medical background of different organ failure and toxicological causes of medical diseases.
- 2.a.6. *Identify* the effects and integration of practicing forensic medicine and clinical toxicology on community to improve health outcomes.
- 2.a.7. *Describe* the principles of quality in professional practice of forensic medicine and clinical toxicology.
- 2.a.8. *Highlight* ethical principles and medico-legal aspects of practice of clinical toxicology and forensic medicine as well as the medical responsibility.
- 2.a.9. *Discuss* the principles of research methodology and ethics of medical research.
- 2.a.10. Outline recent advances in the field of forensic medicine, clinical





toxicology and related basic scientific branches.

#### 2.b. Intellectual Skills:

٢. ب ـ القدرات الذهنية : -

By the end of the program the candidate should be able to:

- 2.b.1. *Design* a diagnostic approach necessary for proper diagnosis and management of intoxicated cases including occupational and pediatric intoxication, and other related medical conditions.
- 2.b.2. *Analyze* different case scenarios of clinical and forensic toxicology, clinical forensic medicine, and forensic pathology as well as the different crime scene evidences investigations, to reach to the cause, mechanism, mode and manner of death.
- 2.b.3. *Choose* the suitable method of analysis needed for toxicological diagnosis either for screening purposes or for confirmatory methods in the living and dead cases.
- 2.b.4. *Construct* a research design and choose proper research methodology in the field of his study, and build upon a research design for thesis work.
- 2.b.5. *Correlate* between different forensic and toxicological conditions and its related physiological, pharmacological and biochemical basis.
- 2.b.6. Assess risks during practicing forensic medicine and clinical toxicology.
- 2.b.7. *Plan* for improvement of professional performance in the field of forensic medicine and clinical toxicology.
- 2.b.8. Solve medical problems met during practicing forensic medicine and





clinical toxicology, even with absence of some administrative tools.

#### 2.c. Practical & Clinical Skills:

By the end of the program the candidate should be able to:

- 2.c.1. *Manage* different toxicological cases and other related medical conditions.
- 2.c.2. Write a proper autopsy report on a given case study.
- 2.c.3. *Write* a primary wound report on different types of traumas and injuries.
- 2.c.4. *Write* death certificates according to the international form of medical certificate of the cause of death after diagnosing death by different clinical and investigatory methods.
- 2.c.5. *Identify* sex and ages from bones and by using the X rays films.
- 2.c.6. *Write* a report on the different medico-legal specimens after their examination by gross and microscopic methods.
- 2.c.7. *Evaluate* medical care supplied to intoxicated patients to continuously improve patient care based on constant self-evaluation.

٢.د. مهارات عامة و منتقلة:

#### 2.d. General and transferable skills:-

By the end of the program the candidate should be able to:

- 2.d.1. *Retrieve*, manage, and manipulate information by all means, including electronic means, in a timely manner.
- 2.d.2. Use the sources of biomedical information and communication





technology to remain current with advances in knowledge and practice.

- 2.d.3. *Establish* life-long self-learning required for continuous professional development.
- 2.d.4. *Work* effectively as a member or leader of a health care team or other professional group.
- 2.d.5. *Communicate* effectively with physicians, other health professionals, and health related agencies.
- 2.d.6. *Demonstrate* compassion, and respect for all patient's rights and treat all patients equally regardless to their believes, culture and behavior.
- Y.d.7. *Appraise* himself, others, and his learning needs during daily professional practice.
- 2.d.8. Manage time effectively

#### **3-** Academic Standards

# ٣ ـ المعايير الأكاديمية للبرنامج:

Academic Reference Standards (ARS) of Master Program of forensic medicine and toxicology, approved in date 5 / 9 / 2013, and in faculty council no. (365) date 16 / 6 / 2013. (ملحق)

#### **4- Reference standards**

# 4- العلامات المرجعية:

a) (۲۰۰۹ مارس) (مارس) المعايير القياسية العامة لبرامج الدراسات العليا (درجة الماجستير) (مارس) Issued by the National Authority for Quality Assurance & Accreditation (ملحق)





- b) External references standards (Benchmarks): المعايير المرجعية الخارجية External reference points/benchmarks are selected to confirm the appropriateness of the objectives, ILOs of the program, (ملحق).
  - **1.** Forensic medicine and forensic sciences program, Department of Forensic Medicine, <u>Faculty of Medicine</u>, <u>Nursing and Health Sciences</u>, <u>Monash University</u>. <a href="http://www.med.monash.edu.au/vifm/">http://www.med.monash.edu.au/vifm/</a>

ملحق 4: مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا الصادرة عن الهيئة.

ملحق ٥: مصفوفة البرنامج مع المعايير الأكاديمية للبرنامج.

ملحق ٦: مصفوفة المقررات مع البرنامج Program-Courses ILOs Matrix

(5): Program structure and contents

5 - هيكل ومكونات البرنامج:أ - مدة البرنامج:

- a) Program duration: 4 semesters (2 years)
- ↓ 1<sup>st</sup> part: One Semester (6 months).
- 4 2<sup>nd</sup> part: Three Semesters (1.5 year).
- Thesis:

يبدأ تسجيلها بعد اجتياز الجزء الأول بنجاح وتجوز مناقشتها بعد مدة لا تقل عن فصلين دراسيين (سنة من تسجيلها) بشرط اجتياز الجزء الثاني بنجاح.

بُ ـ هيكل البرنامج :

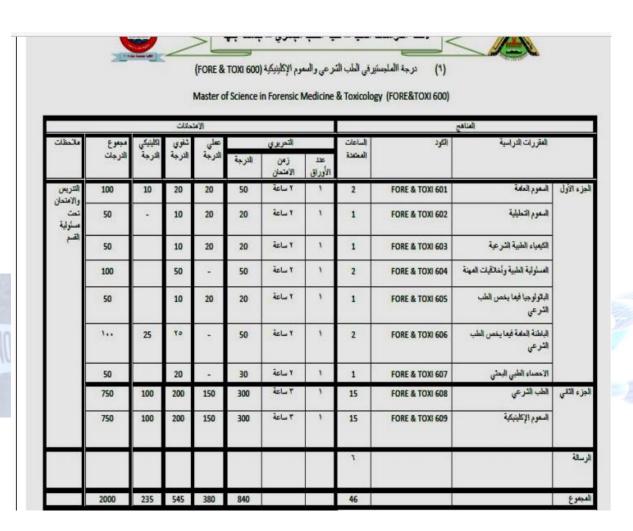
- **Total hours of program** = 46 credit hours
- 1<sup>ST</sup> part: 10 credit hours
- 2<sup>nd</sup> part : 30 credit hours
- Thesis: 6 credit hours
- Compulsory.....all courses
- Elective courses: ..... none
- Selective: ..... none

ج- مستويات ومقررات البرنامج:





# الزامي compulsory







# First part (one semester):

# a- Compulsory courses:

Course Title	Course Code	NO.	Total/1		
		Theoretical	practical	Total/W	semester
1 General toxicology	FORE&TOX I 601	1,6	1	۲,۵	37.5
2-Analytical toxicology	FORE&TOX I 602	0.5	1	1.5	22.5
3- Forensic Chemistry	FORE&TOX I 603	0.5	1	1.5	22.5
4-Medical ethics	FORE&TOX I 604	2	a	2	30
5- Pathology	FORE&TOX I 605	0.5	i	1.5	22.5
6- General medicine	FORE&TOX I 606	1.5	1	2.5	37.5
7- Medical statistics	FORE&TOX	1		1	15
	I 607				





#### Second part (3 semesters):

a-Compulsory courses.

		credit	NO. of	Teaching hours	Total teaching hours	
Course Title	Course Code		Theoretical	practical	Total/ Week	/ 3 semesters
						3 semesters
1 – Forensic medicine	FORE 60 <sup>A</sup>	16	10	10	20	900 hours
2– Clinical toxicology	FORE 60 <sup>4</sup>	16	10	10	20	900 hours
Total:		٣.	۲.	۲.	٤٠	ነለ••hours

b-Elective courses: .... none

b- Selective: ..... none

# 6- محتويات المقرات (راجع توصيف المقررات): مرفق توصيف المقررات طبقا" للنموذج

# (7): Program admission requirements

# 7 ـ متطلبات الإلتحاق بالبرنامج : مادة (17) : يشترط في قيد الطالب لدرجة الماجستير

- أ \_ أن يكون حاصلا على درجة البكالوريوس فى الطب والجراحة من إحدى جامعات جمهورية مصر العربية أو على درجة معادلة لها من معهد علمى معترف به ومعتمدة من المجلس الأعلى للجامعات، بحد أدنى تقدير جيد للتسجيل للماجستير و تقدير مقبول للتسجيل لدرجة للدبلوم.
- يسمح للحاصل على الدبلوم العالى وفقا لنظام هذه اللائحة وبتقدير جيد على الأقل، بتسجيل رسالة لاستكمال درجة الماجستير بشرط ألا يكون قد مر أكثر من ثلاث سنوات على تاريخ حصوله على درجة الدبلوم من كلية الطب- جامعة بنها- وبغض النظر عن تقديره في درجة البكالوريوس وبعد موافقة مجلس القسم ومجلس الكلية.
- \_ يسمح لطالب الماجستير بعد نجاحه في الجزء الاول والثاني ولم يستكمل الرسالة خلال مدة القيد المحددة باللائحة ان يتقدم بطلب استكفاء والحصول على شهاده دبلوم التخصص ، ويحق له التقدم لاستكمال درجه الماجستير مره اخرى خلال





- ثلاث سنوات من نجاحه في الجزء الثاني.
- ب \_ أن يكون قد أمضى السنة التدريبية أو ما يعادلها ( سنة الامتياز ).
  - ج \_ موافقة جهة العمل أو مايفيد انه طبيب حر
- د \_ أن يتفرغ للدراسة لمدة سنة على الأقل في الجزء الثاني (فصلين دراسيين).
  - هـ \_ تسديد الرسوم ومصاريف التدريب واستهلاك الأجهزة

#### مادة (١٩): مواعيد القيد وبدأ الدراسة:

أ ـ يكون التقدم للقيد بالماجستير مرة واحدة في السنة خلال شهرى يوليو وأغسطس من كل عام . وتبدأ الدراسة لدرجة الدبلوم العالى / الماجستير في شهر أكتوبر من كل عام.

# 8 - القواعد المنظمة لإستكمال البرنامج: (طبقاً لما هو مذكور في اللائحة)

مادة (٢٩): يشترط في الطالب لنيل درجة الماجستير في أحد الفروع الإكلينيكية أو العلوم الطبية الأساسية:

- أ- حضور متطلبات المقررات الدراسية والتدريبات الإكلينيكية والعملية والمعملية والميدانية بصفة مرضية طبقا للساعات المعتمدة على ألا تقل نسبة الحضور عن ٧٠%، وفي حالة عدم استيفاء النسبة المذكورة يحرم الطالب من دخول الامتحان وإذا تكرر عدم الاستيفاء يلغي تسجيل الطالب.
  - ب- العمل كطبيب مقيم أصلى او منتدب (زائر) في التخصص بالنسبة للعلوم الإكلينيكية.
  - ج \_ يشترط للطبيب الزائر العمل لمدة سنة على الأقل في قسم التخصص بالكلية بالنسبة للعلوم الإكلينيكية.
    - د- النجاح في امتحان الجزئين الأول والثاني من الدرجة.
      - هـ اجتياز الطالب الدورات الآتية:
    - ♦ الحاسب الآلي (دورة في مقدمة الحاسب دورة في تطبيقات الحاسب الآلي).
- ◆ (أخلاقيات البحث العلمي- منهجية البحث العلمي الإحصاء الطبي) وذلك مع تسجيل برتوكول الرسالة على
   أن تكون هذه الدورات من داخل جامعة بنها .
- ط- اجتياز اختبار التويفل بمستوى لا يقل عن ٤٠٠ وحدة للماجستير وذلك قبل مناقشة الرسالة من أحد الجهات المعتمدة و فقا لمتطلبات الجامعة





و- إعداد بحث فى موضوع تقره الجامعة بعد موافقة مجلس القسم ومجلس الكلية ينتهى بإعداد رسالة تقبلها لجنة التحكيم مع نشر بحث مشتق من الرسالة في مجلة علمية معترف بها وذات موقع الكتروني ومسجلة بقائمة مجلات النشر بالكلية.

# 9- Students Assessment Methods:

# -9طرق وقواعد تقييم الملتحقين بالبرنامج

مخرجات التعلم المستهدفة	الوسيلة	م
To assess knowledge and understanding &	Written examination	1
intellectual skills:		•
2.a.12.a.10., 2.b.12.b.^.		
To assess knowledge and understanding,	Oral examination	
intellectual skills & General & transferable		2
skills		
2.a.12.a.10., 2.b.12.b. <sup>\(\Lambda\)</sup> .,		
2.d.12.d.8.		1001
To assess Practical & Clinical skills,	Practical & clinical examination	
knowledge and understanding, intellectual		3
skills & General & transferable skills:	20	
2.a.12.a.10., 2.b.12.b. <sup>\(\lambda\)</sup> .		
2.c.12.c.7. and 2.d.12.d.8.		
TO assess knowledge and understanding,	Thesis Discussion	4
intellectual skills & practical and clinical		4
skills and General & transferable skills:		
.Ya.12.a.10., 2.b.12.b.\(^{\text{\lambda}}\).		
2.d.12.d.8 & 2.c.12.c.7.		

# Final exam:





الامتحانات								المناهج			
ملاحظات	مجموع	اكلينيكي الدرجة	شفوي	عملي	التحريري		الساعات	الكود	المقررات الدراسية		
	الدرجات	الدرجة	الدرجة	الدرجة	الدرجة	زمن الامتحان	عدد الأوراق	المعتمدة			
التدريس و الامتحان	100	10	20	20	50	۲ ساعة	,	2	FORE & TOXI 601	السموم العامة	الجزء الأول
تُحت مسئولية	50	-	10	20	20	۲ ساعة	١	1	FORE & TOXI 602	السموم التحليلية	
القسم	50		10	20	20	۲ ساعة	١ ،	1	FORE & TOXI 603	الكيمياء الطبية الشرعية	
	100		50	-	50	۲ ساعة	١	2	FORE & TOXI 604	المسنولية الطبية وأخلاقيات المهنة	
	50		10	20	20	۲ ساعة	١	1	FORE & TOXI 605	الباتولوجيا فيما يخص الطب الشرعي	
	1	25	70	-	50	۲ ساعة	١	2	FORE & TOXI 606	الباطنة العامة فيما يخص الطب الشرعي	
	50		20	-	30	۲ ساعة	١	1	FORE & TOXI 607	الاحصاء الطبي البحثي	
	750	100	200	150	300	٣ ساعة	)	15	FORE & TOXI 608	الطب الشرعي	الجزء الثاني
	750	100	200	150	300	٣ ساعة	,	15	FORE & TOXI 609	السموم الإكلينيكية	
								۲			الرسالة
	2000	235	545	380	840			46			المجموع

# 10- Evaluation of Program:

# 10 - طرق تقويم البرنامج:

Evaluator	Tools	Sample
مقییم داخلی(s) Internal evaluator	<ul><li>Focus group discussion</li><li>Meetings</li></ul>	Reports
	<ul><li> Questionnaire</li></ul>	
مقییم خارجی(s) External Evaluator	<ul> <li>Reviewing according to external evaluator</li> <li>Checklist report of NAQAA.</li> </ul>	Reports
طلاب السنة النهائية (s) Senior student	مقابلات , استبیان	جميع الطلبة
الخريجون Alumni	مقابلات ،استبيان	عبلت ديم %٥٠ زيد راغة لا غبيد
Stakeholder (s) أصحاب العمل	مقابلات ،استبيان	ينة ممثلة لجميح جمارت





# 11: استراتيجيات التعليم و التعلم علي مستوي البرنامج:

**Active learning** 

١. استراتيجية التعلم النشط.

٢. استراتيجية التعليم المبنى على النتائج. Outcome-based learning

Case based learning . "

٤. استر اتيجية التعليم باستخدام الوسائل التكنولوجية الحديثة E-Learning

Ass. Prof. /Abdelmonem G. Madboly:

منسق البرنامج

رئيس مجلس القسم :ا.د شيرين الخولى

courses

توصيف المقررات Program

14





# 1- General toxicology 2- Analytical toxicology 3- Forensic Chemistry 4- Medical Ethics 5- Pathology 6- General Medicine 7- Medical Statistics Second part 1-clinical toxicology 2- forensic medicine





# الملحقات:

ملحق ۱: Academic standard of the program

ملحق ٢: المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة.

ملحق 3: Benchmarks (المعايير المرجعية الخارجية)

ملحق 4: مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا

الصادرة عن الهيئة.

ملحق ٥: مصفوفة البرنامج مع المعايير الأكاديمية للبرنامج.

ملحق ٦: مصفوفة المقررات مع البرنامج

Matrix

# ملحق ۱:Academic standard of the program

جامعة ونما كلية الطب قسو الطب الشرعي و السموم الأكلينيكية

# وثيقة المعايير الأكاديمية المرجعية لبرنامج الماجستير

# Academic Reference Standards (ARS) for Master Degree in Forensic Medicine and Toxicology

# 1. Attributes of gratitude.

- 1.1. Have the capability to be a scholar, understanding and applying basics, methods and tools of scientific research and clinical audit in forensic medicine and clinical toxicology.
- 1.2. Appraise and utilize scientific knowledge to continuously update and improve clinical practice in forensic medicine and clinical toxicology.
- 1.3. Acquire sufficient medical knowledge in the basic biomedical, clinical, behavioral and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care in forensic medicine and clinical toxicology.
- 1.4. Provide patient care that appropriate, effective and compassionate for dealing with common health problems and health promotion using evidence-based and update information.
- 1.5. Identify and share to solve health problems in forensic medicine and clinical toxicology.
- 1.6. Acquire all competencies that enable him to provide safe, ethical and evidence based clinical care including use of new technology in forensic medicine and clinical toxicology

- 1.7. Demonstrate interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork, as supervisor, and trainer in relation to colleagues, medical students and other health professions.
- 1.8. Acquire decision making capabilities in different situations related to forensic medicine and clinical toxicology.
- 1.9. Show responsiveness to larger context of the health care system, including e.g. the organization of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.
- 1.10.Be aware of public health and health policy issues and share in system-based improvement of health care.
- 1.11.Show appropriate attitudes and professionalism.
- 1.12.Demonstrate skills of lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages in forensic medicine and clinical toxicology.

# 2. Academic Standards.

# 2.1. Knowledge and understanding.

By the end of Master program, the candidate should recognize and understand the followings.

- **2.1.1.** Principles and basic theories and concept in the field of Forensic science, clinical toxicology and related medical sciences.
- 2.1.2. Effect of medical practice of forensic medicine & clinical toxicology and its reflection on community (Candidates must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the

- ability to call effectively on other resources in the medical system to provide optimal health care).
- **2.1.3.** Recent advances in the field of Forensic medicine, clinical toxicology and related scientific branches.
- **2.1.4.** Ethical principles and medico-legal aspects of practice of clinical toxicology and forensic medicine as well as medical responsibility.
- **2.1.5.** Principles and basic concepts of quality in professional practice including planning and improvement of performance.
- **2.1.6.** Research methodology and Ethics of medical research.

#### 2.2. Intellectual skills:

By the end of Master program, candidate should be able to recognize the followings:

- **2.2.1.** Evaluation and interpretation data for proper diagnosis in the field of clinical toxicology and forensic medicine.
- 2.2.2. Solving medical problems, in the absence of some administrative tools.
- **2.2.3.** Correlation between different scientific medical knowledge and their application in forensic medicine and clinical toxicology practice (Evidence-based medicine).
- **2.2.4.** Designing and conducting scientific research, and research hypothesis.
- **2.2.5.** Risk assessment in medical practice in forensic medicine and clinical toxicology.
- **2.2.6.** Planning for improvement of professional performance in the field of forensic medicine and clinical toxicology.
- **2.2.7.** Decision making skills.

# 2.3. Practical/Professional skills

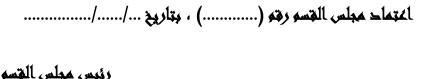
# By the end of Master program, candidate should accept the followings skills:

- **2.3.1.** Application of the basic and up to date Professional skills during practicing forensic medicine & clinical toxicology.
- **2.3.2.** Writing and evaluating the different medical & medico-legal reports in the field of forensic medicine and clinical toxicology.
- **2.3.3.** Evaluation of medical care, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self–evaluation.

# 2.4. Communication and transferable skills.

By the end of Master program, candidate should accept the following skills:

- **2.4.1.** Interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.
- 2.4.2. Effective use of Internet Technology and healthcare information system in medical practise and patient medical records.
- **2.4.3.** Self-appraisal and needs evaluation.
- **2.4.4.** Use information by any means; in print or electronic format.
- **2.4.5.** Incorporate formative evaluation feedback into daily practice.
- **2.4.6.** Team work/leadership in different professional tasks.
- **2.4.7**. Time management effectively.
- **2.4.8.** Continuous Self-learning ability and medical education program participation.



# ملحق 2: المعايير القياسية العامة لبرامج الدراسات العليا

# برامج الماجستير

#### ١- موصفات الخريج

خريج برنامج الماجستير في أي تخصص يجب أن يكون قادرا على:

- ١-١ إجادة تطبيق أساسيات ومنهجيات البحث العلمي واستخدام أدواته المختلفة
  - ١-٢ تطبيق المنهج التحليلي واستخدامه في مجال التخصص
- ١-٣ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في مماسته المهنية
  - ١-٤ إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص
    - ١-٥ تحديد المشكلات المهنية وإيجاد حلول لها
- ١-٦ إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية
   المناسبة بما يخدم ممارسته المهنية
  - ١-٧ التوصل بفاعلية والقدرة على قيادة فرق العمل
    - ١-٨ اتخاذ القرار في سياقات مهنية مختلفة
  - ١-٩ توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها
- ١٠-١ إظهار الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة فى ضوء المتغيرات العالمية
   والاقليمية
  - ١-١ التصرف بما يعكس الالتزام بالنزهة والمصداقية والالتزام بقواعد المهنة
    - ١ ١ تنمية ذاته أكاديميا ومهنيا وقادرا على التعلم المستمر

# -2 - المعايير القياسية العامة

٢-١ المعرفة والفهم:

بأنتهاء دراسة برنامج الماجيستير يجب ان يكون الخريج على فهم ودراية بكل من:

- ٢-١-١ النظريات والاساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة
  - ٢-١-٢ التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة
    - ٢-١-٣ التطورات العلمية في مجال التخصص
  - ٢-١-٤ المبادئ الاخلاقية والقانونية للممارسة المهنية في مجال التخصص
  - ١-١-٥ مبادئ واساسيات الجودة في الممارسة المهنية في مجال التخصص
    - ٢-١-٦ اساسيات واخلاقيات البحث العلمى

#### ٢-٢ المهارات الذهنية:

بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على:

- ٢-٢-١ تحليل وتقيم المعلومات في مجال التخصص والقياس عليها لحل المشاكل
  - ٢-٢-٢ حل المشاكل المتخصصة مع عدم توافر بعض المعطيات
    - ٢-٢-٣ الربط بين المعارف المختلفة لحل المشاكل المهنية
  - ٢-٢-٤ اجراء دراسة بحثية او كتابة دراسة علمية منهجية حول مشكلة بحثية
    - ٢-٢- تقييم المخاطر في الممارسات المهنية في مجال التخصص
      - ٢-٢-٦ التخطيط لتطوير الاداء في مجال التخصص
      - ٢-٢-٧ اتخاذ القرارات المهنية في سياقات مهنية متنوعة
        - ٢-٣ المهارات المهنية

بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على:

٢-٣-١ اتقان المهارات المهنية الاساسية والحديثة في مجال التخصص

٢-٣-٢ كتابة وتقييم التقارير المهنية ٢-٣-٣ تقييم الطرق والادوات القائمة في مجال التخصص

٢-٤ المهارات العامة والمنتقلة:

بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :

٢-٤-١ التواصل الفعال بأنواعة المختلفة

٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية

٢-٤-٣ التقييم الذاتي وتحديد احتياجاته التعليمية

٢-٤-٤ استخدام المصادر المختلفة لحصول على المعلومات والمعارف

٢-٤-٥ وضع قواعد ومؤشرات تقييم اداء الاخارين

٢-٤-٢ العمل في فريق سياقات كهنية مختلفة

٢-٤-٧ ادارة الوقت بكفاءة

٢-٤-٨ التعلم الذاتي والمستمر



# ملحق 3: Benchmarks (المعايير المرجعية الخارجية)



# Monash University Handbook 2011 Postgraduate Forensic medicine

Managing faculty Faculty of Medicine, Nursing and Health Sciences

# **Description**

Forensic medicine aims to develop academic standards in clinical forensic medical practice and

to produce graduates who have a sound knowledge of medico-legal principles. Students have the

opportunity to develop practical skills in research as well as in providing clinical forensic

services to the community.

#### Units

For the schedule of units required to complete a given course in this area of study, refer to the

Handbook entry for the relevant course.

# **Relevant Courses**

3884 Graduate Certificate of Nursing (Forensic)

3412 Master of Forensic Medicine

# 3884 - Graduate Certificate of Nursing (Forensic)

This course entry should be read in conjunction with information provided in the 'Faculty

information' section of this Handbook by the Faculty of Medicine, Nursing and Health Sciences

Managing faculty Medicine, Nursing and Health Sciences

**Abbreviated title** GradCertNurs(Forens)

Total credit points

required 24

Standard duration

of study (years) 1 year PT

Study mode and

**location** Off-campus (Clayton)

Admission, fee and

application details http://www.monash.edu/study/coursefinder/course/3884

Contact details

Ms Debbie Hellings, course administrator: telephone +61 3 9684 4115; email debbie.hellings@monash.edu or debbieh@vifm.org
Visit website http://www.vifm.org

Course

coordinator Dr Angela Williams

#### Notes

- · This course is not available to international student visa holders.
- · Part-time study only.

# **Description**

This course, offered by the Department of Forensic Medicine, aims to assist those with an

interest in pursuing professional development in the area of forensic nursing. Areas covered are:

- forensic knowledge and nursing responsibilities in forensic cases
- · clinical consultations with victims of crime and offenders
- · medico-legal report writing and provision of evidence in court
- theoretical and cultural aspects of interpersonal violence.

# **Objectives**

On completion of the course, graduates will have gained the knowledge, skills and attributes

(theoretical and practical) necessary to:

- · provide a comprehensive nursing service for victims of interpersonal violence
- demonstrate a thorough working knowledge of the forensic and nursing responsibilities in

forensic cases

 obtain highly developed communication skills in clinical consultations with victims of

crime and offenders

· write medico-legal reports and provide evidence in courts on a range of clinical situations

and consultations

 $\cdot$  liaise effectively with associated agencies, law enforcement, criminal justice system and

counselling services on issues surrounding individual cases

· comprehend theoretical and cultural aspects of interpersonal violence.

# **Assessment**

Assessment includes case study reports, presentations, online discussion, clinical

placement/attachment.

# **Structure**

This course comprises four core units.

# Requirements

#### Semester 1

FOR5001 Sexual assault nursing I

FOR5003 Understanding injuries

#### Semester 2

- FOR5002 Sexual assault nursing II
- FOR5004 Nursing and the criminal justice system

# Award(s)

Graduate Certificate of Nursing (Forensic)

# FOR5001 - Sexual assault nursing I 6 points, SCA Band 0 (NATIONAL PRIORITY), 0.125 EFTSL

Refer to the specific census and withdrawal dates for the semester(s) in which this unit is offered.

Level Postgraduate

Faculty Faculty of Medicine, Nursing and Health Sciences

Offered Clayton First semester 2011 (Off-campus)

Coordinator(s) Dr Angela Williams

#### Synopsis

Divided into key themes surrounding the theory and historical perspective of rape and sexual

assault, the incidence and prevalence of sexual offences, history taking, examination findings,

and understanding the complexities of victims of sexual assault, this unit provides the

foundations to understanding adult sexual assault nursing and forms the basis for FOR5002. Both

units give the sexual assault nurse a broad understanding of managing adult sexual assault in

their community. Exploring best practice models from national and international resources the

student learns to critically evaluate these and other journal articles provided.

# **Objectives**

Upon completion of this unit the student will be able to:

a. Describe the incidence and prevalence of violence against women and sexual assault as it

relates to the community;

- b. Define the elements of sexual assault and the law surrounding sexual offences:
- c. Describe both female and male genital anatomy;
- d. Develop a clear understanding of genital physiology; e) Evaluate sexual assault services,

existing models and journal reviews;

e. Develop skills in communicating with victims of sexual assault whilst understanding the

complexities of history taking in these circumstances;

- f. Define the process used to perform a high quality sexual assault examination;
- g. Understand the importance of clear and precise record keeping, documentation and the

advantages and disadvantages photography as an adjunct to written records and i. Identify and understand the needs of vulnerable subgroups or of victims from diverse and/or ethnic communities.

#### Assessment

Workbook Activities (20%)

Online Discussion (10%)

Case Presentation (20%)

Residential Participation (10%)

Case Study (40%)

#### Chief examiner(s)

Dr Jo Ann Parkin

### Off-campus attendance requirements

Compulsory 3 day workshop each semeste

# FOR5003 - Understanding injuries

# 6 points, SCA Band 0 (NATIONAL PRIORITY), 0.125 EFTSL

Refer to the specific census and withdrawal dates for the semester(s) in which this unit is offered.

Level Postgraduate

Faculty Faculty of Medicine, Nursing and Health Sciences

Offered Clayton First semester 2011 (Off-campus)

Coordinator(s) Dr Angela Williams

#### **Synopsis**

The unit is divided into key themes surrounding pathophysiology, causation, classification, and

documentation of injuries. Designed to give participants advanced skills in assessing injuries

with specific regard to these themes and common injury patterns enabling them to interpret

injuries and provide opinions as to their likely cause to the criminal justice system. The unit

explores best practice models from national and international resources and requires the student

to critically evaluate these and other journal articles provided. A national and international focus

is maintained throughout as the student gains skills adaptable to professional opportunities

interstate and overseas.

# **Objectives**

Upon completion of this unit the student will be able to:

- a. Demonstrate an understanding of the pathophysiology of injuries;
- b. Describe the limitations of accurate interpretation of injuries or the absence of injuries;
- c. Use forensic photography as an adjunctive method of documentation;
- d. Detail the classification of injuries;
- e. Critically examine the current literature surrounding injuries and injury patterns;

f. Analyse and interpret mechanism and circumstances by which the injuries were

sustained;

#### Assessment

Workbook Activities (30%)

Case Studies (30%)

Case Presentation and Residential Participation (10%)

Assignment (30%)

#### Chief examiner(s)

Dr Angela Williams

### Off-campus attendance requirements

Compulsory 3 day workshop each semester.

# FOR5002 - Sexual assault nursing II

# 6 points, SCA Band 0 (NATIONAL PRIORITY), 0.125 EFTSL

Refer to the specific census and withdrawal dates for the semester(s) in which this unit is offered.

Level Postgraduate

Faculty Faculty of Medicine, Nursing and Health Sciences

Offered Clayton Second semester 2011 (Off-campus)

Coordinator(s) Dr Angela Williams

#### **Synopsis**

It is intended that this unit will provide the foundations to understanding adult sexual assault

nursing alongside the unit FOR5001. Together these units will give the sexual assault nurse a

broad understanding of managing adult sexual assault in their community. The unit is divided

into key themes surrounding examination findings, specimen collection, therapeutics medico

legal issues, interagency liaison and developing a sexual assault service. Group and studentstudent

facilitated learning is encouraged as students engage each other, exchange opinions and

offer/receive peer review. The unit explores best practice models from national and international

resources and requires the student to critically evaluate these and other journal articles provided.

A national and international focus is maintained throughout as the student gains skills adaptable

to professional opportunities interstate and overseas.

#### **Objectives**

Upon completion of this unit the student will be able to:

a. Identify, classify and interpret both body and genital injuries sustained by a sexual assault

victim;

- b. Understand the incidence and prevalence of injury patterns;
- c. Develop a sound knowledge basis of the science and philosophy behind collecting

forensic specimens as well as being able to practise competent and proficient collection

techniques;

 d. Apply best practice evidence based medicine when evaluating for, preventing and

treating injuries, sexually transmitted diseases and pregnancy alongside other issues in

therapeutically managing a sexual assault victim;

e. Communicate effectively with other agencies involved in the management of a sexual

assault case including the handling of sensitive information;

f. Identify special circumstances in which sexual assault occurs and be able to teach and

responding to community attitudes surrounding these issues;

g. Critically analyse the role of the health professional in a sexual assault case and the

complexities associated with this role; and

h. Apply the knowledge and skills gained from the combination of this and the prerequisite

unit to aid in the establishment of a high quality 24 hour service to deal with sexual

assault cases.

#### **Assessment**

Workbook Activities (20%), Online Discussion (10%), Case Presentations (20%), Residential

Participation (10%), Case Study (40%)

# Chief examiner(s)

Dr Jo Ann Parkin

#### **Contact hours**

Compulsory 3 day workshop each semester

#### **Prerequisites**

FOR5001

# FOR5004 - Nursing and the criminal justice system

# 6 points, SCA Band 0 (NATIONAL PRIORITY), 0.125 EFTSL

Refer to the specific census and withdrawal dates for the semester(s) in which this unit is offered.

Level Postgraduate

Faculty Faculty of Medicine, Nursing and Health Sciences

Offered Clayton Second semester 2011 (Off-campus)

Coordinator(s) Dr Angela Williams

#### **Synopsis**

The unit covers four themes: Introduction to the Criminal Justice System and Sexual Offences;

Medico legal Documentation; Rules of Evidence; Giving Evidence and Advocacy Techniques.

Designed to give nursing students knowledge of the legal system (in particular the criminal

justice system), the unit examines the hierarchy of the legal system and the courts. The

importance of providing objective and informative opinion evidence to the court and an

understanding of the boundaries of being an expert witness is also covered. The moot court

allows students to practice skills and gain confidence in the plan of the courtroom and a site visit

demonstrates and the process and procedures of a trial.

#### **Objectives**

Upon completion of this unit the student will be able to:

a. Understand the basics of the legal system and be able to locate appropriate law in relation

to their professional duties;

b. Demonstrate knowledge of the general principles of the laws of evidence, in particular

the rules around opinion evidence;

- c. Understand the role of the expert witness;
- d. Prepare a medico legal report; and
- e. Utilize techniques necessary for managing evidence in chief, cross examination and re

examination.

#### Assessment

Workbook Activities (30%)

Case Studies (30%)

Presentation and Residential participation (10%)

Assignment (10%)

# Chief examiner(s)

Dr Angela Williams

# Off-campus attendance requirements

Compulsory 3 day workshop each semester.

# **Master of Forensic Medicine**

This course entry should be read in conjunction with information provided in the 'Faculty

information' section of this Handbook by the Faculty of Medicine, Nursing and Health Sciences

Managing faculty Medicine, Nursing and Health Sciences

Abbreviated title MForensMed

Total credit points

required 72 Standard duration of study (years) 3 years PT Study mode and location Off-campus (Clayton)

**Contact details** 

Ms Debbie Hellings, course administrator: telephone +61 3 9684 4115; email debbie.hellings@monash.edu or debbieh@vifm.org
Visit website http://www.vifm.org

**Course coordinator** Associate Professor David Wells **Notes** 

- This course is not available to international student visa holders.
- · Part-time study only.

# **Description**

This course is designed to further develop medical practitioners knowledge and skills so that they

are able to provide a high quality clinical forensic medical service. This will include ethical and

legal issues arising in forensic medical practice, the skills required to interpret injury patterns and communication with the justice system.

# **Objectives**

This course is designed to:

- establish academic standards in clinical forensic medical practice
- produce graduates who have a sound knowledge of medico-legal principles
- develop practitioners skills in providing clinical forensic services in the community
- $\boldsymbol{\cdot}$  strengthen the teaching- research nexus in forensic medical education
- $\boldsymbol{\cdot}$  foster the development of career pathways in forensic medicine.

# **Assessment**

Assessment activities, including the thesis option, are designed to further develop the

participants' understanding of the theoretical principles underpinning forensic practice.

Assessment methods will vary but may include coursework and workshop participation, formal

assignments, casebooks and minor thesis.

# **Structure**

This course is offered via coursework and minor thesis, or by coursework only. The coursework component comprises core and elective units.

# Requirements

#### Core units

FOR4001 Medical evidence

- FOR4002 Injury interpretation
- FOR4003 Ethics, medicine and the law

#### Coursework and minor thesis option

Students complete:

- · 48 points of electives
- · a minor thesis

Students undertaking the minor thesis are required to prepare a research proposal at an early

stage of their minor thesis enrolment and have this approved by their thesis supervisor. The area

of research must cover a topic directly related to forensic medicine, and should include at least

one elective unit of instruction on research methodologies and basic statistics.

#### **Coursework only option**

Students complete:

• 54 points of electives

#### **Elective units**

Students select units from the list below or may also (with departmental approval) choose other

graduate units offered by the Faculty of Medicine, Nursing and Health Sciences, other faculties

at Monash University or other tertiary institutions.

- FOR4004 Elements of the forensic sciences
- FOR4005 Child and adolescent sexual abuse
- FOR4006 Non accidental injury in childhood
- FOR5005 Adult sexual assault
- FOR5006 Traffic medicine
- FOR5007 Elements of forensic toxicology
- FOR5008 Custodial medicine
- FOR5010 Project in forensic medicine

# Minimum grade for course completion

Students must achieve a minimum distinction grade average in all three core units to qualify for

this award. Students who do not achieve this average will exit with a Graduate Certificate of

Forensic Medicine or Graduate Diploma of Forensic Medicine, depending on the units

completed, providing all requirements for the award has been met.

# Alternative exit(s)

Students may exit this course with a Graduate Certificate of Forensic Medicine or Graduate

Diploma of Forensic Medicine providing all requirements of that award have been met.

# Award(s)

Master of Forensic Medicine

#### FOR4001 - Medical evidence

print version

# 6 points, SCA Band 3, 0.125 EFTSL

Refer to the specific census and withdrawal dates for the semester(s) in which this unit is offered.

Level Postgraduate

Faculty Faculty of Medicine, Nursing and Health Sciences

Offered Clayton First semester 2012 (Off-campus)

Clayton Second semester 2012 (Off-campus)

Coordinator(s) Associate Professor David Ranson

#### Synopsis

The law of evidence is a branch of adjectival law. It consists of legal rules, procedural rules and

administrative arrangements whereby courts and tribunals within the justice system receive and

evaluate evidence.

To perform satisfactorily in this field a forensic medical practitioner's communication skills must

be of a high order and they need to understand the legal principles that govern the admissibility

of their evidence.

This unit will enable students to gain practical skills in the delivery of medical evidence in courts

and tribunals, in the preparation of medico legal reports to be used as items of evidence and in

the techniques of advocacy that can modify the way in which a medical practitioner's evidence is

received by courts.

Tutorials and presentations will be used to lay the foundations for some of the basic academic

objectives of the course. Workshops will be used to establish witness skills and oral

communication techniques and a moot court will be used to develop practical skills in presenting

evidence and developing strategies to deal with the medico legal and advocacy issues that arise

during the examination and cross-examination of witnesses including expert witnesses.

#### **Outcomes**

On completion of this unit the student is expected to:

- 1. display an understanding of decision making processes in legal practice;
- 2. demonstrate knowledge of the general principles of the laws of evidence;
- 3. comprehend the special rules regarding opinion evidence;
- 4. understand the role of the expert witness;
- 5. be conversant with the rules governing the reception of evidence to the courts;

- demonstrate competency in preparing medico-legal reports;
- 7. have developed the skills required to present evidence in court;
- 8. have acquired the techniques necessary for managing examination-in-chief, cross

examination and re-examination.

#### Assessment

Assignments/Essays (50%)

Casebook Workbook (25%)

Skills Evaluation (25%)

#### Chief examiner(s)

Associate Professor David Ranson

#### Off-campus attendance requirements

Compulsory 2 day workshop

# FOR4002 - Injury interpretation

print version

# 6 points, SCA Band 3, 0.125 EFTSL

Refer to the specific census and withdrawal dates for the semester(s) in which this unit is offered.

Level Postgraduate

Faculty Faculty of Medicine, Nursing and Health Sciences

Offered Clayton First semester 2012 (Off-campus)

Clayton Second semester 2012 (Off-campus)

Coordinator(s) Associate Professor D Wells

# **Synopsis**

The unit focuses on the issues surrounding the interpretation of injuries. Areas include the

pathophysiology of injuries with particular reference to the anatomical, physiological and

pathological principles; injury classification; documentation including forensic photography;

injury patterns and circumstances of causation. Students will be expected to participate with

clinical and post mortem cases.

#### **Outcomes**

On completion of this unit the student will be expected to:

- 1. display an understanding of the pathophysiology of injuries;
- 2. show familiarity with the factors limiting accurate injury interpretation;
- 3. interpret the forces producing injuries;
- 4. apply the principles of forensic photography;
- 5. demonstrate a detailed understanding of the classification of injuries;
- 6. be able to accurately document injuries;
- 7. analyse and interpret mechanisms and circumstances by which the injuries were sustained.

#### Assessment

Assignments / Essays (20%)

Case Studies (30%)

Casebook workbook (30%)

Skills Evaluation (20%)

#### Chief examiner(s)

Associate Professor David Wells

#### Off-campus attendance requirements

Compulsory 2 day workshop

#### FOR4003 - Ethics, medicine and the law

# 6 points, SCA Band 3, 0.125 EFTSL

Refer to the specific census and withdrawal dates for the semester(s) in which this unit is offered.

Level Postgraduate

Faculty Faculty of Medicine, Nursing and Health Sciences

Offered Clayton First semester 2012 (Off-campus)

Clayton Second semester 2012 (Off-campus)

Coordinator(s) Emeritus Professor L Waller

#### **Synopsis**

The unit aims to help students become familiar with the tools and vocabulary of ethical discourse

in medicine. A framework for this discourse is built, based on the four basic principles of

autonomy, beneficence, non-maleficence and justice. The elements which go to make up the

Australian Legal System are covered as well as those particular areas of law relating to forensic

medical practice, i.e. consent, confidentiality and disclosure, issues at both the beginning and end of life.

#### **Outcomes**

The aims of this unit are:

1. to develop the student's awareness and understanding of the ideas and issues in medical

ethics so that in practice, the interests of their patients/clients are safeguarded;

2. to develop the student's knowledge and understanding of relevant areas of the law so that

in practice their contribution to the justice system is optimal.

#### **Assessment**

Assignments / Essays (50%)

Presentations (25%)

Casebook Workbook (25%)

#### Chief examiner(s)

**Emeritus Professor Louis Waller** 

#### Off-campus attendance requirements

Compulsory 2 day workshop

# FOR4004 - Elements of the forensic sciences 6 points, SCA Band 0 (NATIONAL PRIORITY), 0.125 EFTSL

Refer to the specific census and withdrawal dates for the semester(s) in which this unit is offered.

Level Postgraduate

Faculty Faculty of Medicine, Nursing and Health Sciences

Offered Clayton First semester 2012 (Off-campus)

Clayton Second semester 2012 (Off-campus)

Coordinator(s) Mrs Anna Davey

#### **Synopsis**

Practitioners need to be familiar with the scope and limitations of the various branches of

forensic science to know when and how they may assist in particular cases.

Topics to be covered

include the principles of forensic science, forensic biology, forensic botany, crime scene

examination, specimen collections, forensic anthropology, forensic odontology and forensic

entomology.

#### **Outcomes**

On completion of this unit the student is expected to:

- 1. show familiarity with the principles of forensic science generally and its scope;
- 2. comprehend the scope and limitations of forensic science generally and its subsections in

particular;

3. understand the tests and analyses used in braches of forensic science to assist in the

proper application of their results in particular cases;

4. know what specimens would be applicable for forensic science analysis in particular

cases;

- demonstrate competence in the collection storage and security of forensic specimens;
- 6. evaluate results of forensic scientific analysis meaningfully.

#### Assessment

Assignments / Essays (25%)

Case Studies (15%)

Presentations (10%)

Casebook Workbook (50%)

#### Chief examiner(s)

Mrs Anna Davey

#### Off-campus attendance requirements

Compulsory 2 day workshop

#### FOR4005 - Child and adolescent sexual abuse

# 6 points, SCA Band 0 (NATIONAL PRIORITY), 0.125

### **EFTSL**

Refer to the specific census and withdrawal dates for the semester(s) in which this unit is offered.

Level Postgraduate

Faculty Faculty of Medicine, Nursing and Health Sciences

Offered Clayton First semester 2012 (Off-campus)

Clayton Second semester 2012 (Off-campus)

Coordinator(s) Associate Professor David Wells

#### **Synopsis**

Paediatric forensic medicine encompasses the medico-legal issues arising from the provision of a

medical service to children. The unit will largely focus on the medical assessment of cases of

suspected child sexual abuse.

The aim of this unit is to develop student's skills in the evaluation and management of children

and adolescents suspected of being sexually abused. Integral to both evaluation and management

will be a knowledge of the relevant legislation, policing and protective agencies, injury patterns,

specialised investigative techniques and treatment.

#### **Outcomes**

On completion of this unit the student will be expected to:

- 1. Display a detailed understanding of the roles of health practitioners in assessing cases of
- suspected child sexual abuse.
- 2. Demonstrate an understanding of sexual development and behaviour in children.
- 3. Demonstrate an awareness of the ethical and legal issues relevant to cases of suspected

child sexual abuse.

- 4. Describe normal genital anatomy and physiology, and be able to interpret pathological conditions.
- 5. Apply medical and forensic principles to the evaluation of cases of suspected child sexual

abuse.

6. Display a broad comprehension of the consequences, treatment and prevention of child sexual abuse.

7. Recognise the role of the other disciplines involved in investigations; protective workers,

police, lawyers.

8. Recognise the medical and legal implications of a sexually transmitted infection in a

child.

9. Display a detailed understanding of the roles of health practitioners in assessing cases of

suspected child sexual abuse.

- 10. Demonstrate an understanding of sexual development and behaviour in children.
- 11. Demonstrate an awareness of the ethical and legal issues relevant to cases of suspected

child sexual abuse.

- 12. Describe normal genital anatomy and physiology, and be able to interpret pathological conditions.
- 13. Apply medical and forensic principles to the evaluation of cases of suspected child sexual abuse.
- 14. Display a broad comprehension of the consequences, treatment and prevention of child sexual abuse.
- 15. Recognise the role of the other disciplines involved in investigations; protective workers, police, lawyers.
- 16. Recognise the medical and legal implications of a sexually transmitted infection in a child.

#### Assessment

Assignment 1 - Workbook questions 2,3,4, and 9: 15%

Assignment 2 - Case critique: 20%

Assignment 3 - Workbook questions 12, 13, 14, 15: 20%

Face to face teaching & case presentation: 15%

Essay: 30%

#### Chief examiner(s)

Dr Anne Smith

#### Contact hours

12 hours of study per week over the semester. This will include contact time (25 hours), private study (text and readings), assessment tasks (case studies, assignments), and involvement in case work, plus a compulsory 2 day workshop **Off-campus attendance requirements** 

Off-campus (distance education) with a two-three day attendance block during the semester.

Additional information on this unit is available from the faculty at: http://www.med.monash.edu.au/vifm/

Additional information on this unit is available from the faculty at: <a href="http://www.med.monash.edu.au/vifm/">http://www.med.monash.edu.au/vifm/</a>

# ملحق 4: مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية العامة

# مواصفات الخريج:

1.1. Have the capability to be a scholar, understanding and applying basics, methods and tools of scientific research and clinical audit in forensic medicine and clinical toxicology.	Faculty of Medicine,  Nursing and Health Sciences, Monash University	مواصفات الخريج بالمعايير القياسية العامة لبرامج الدراسات العليا (درجة الماجستير) إجادة تطبيق أساسيات ومنهجيات البحث العلمى واستخدام أدواته المختلفة
1.2.Appraise and analyze scientific knowledge to continuously update and improve clinical practice in forensic medicine and clinical toxicology.  1.3.Acquire sufficient medical knowledge in the basic biomedical, behavioral and clinical sciences, and apply such knowledge in patient care in forensic medicine and clinical toxicology.	· demonstrate a thorough working knowledge of the forensic and nursing responsibilities in forensic cases  Apply best practice evidence based medicine when evaluating for, preventing and treating injuries, sexually transmitted diseases and pregnancy alongside other issues in therapeutically managing a sexual assault victim;	تطبيق المنهج التحليلي واستخدامه في مجال التخصص التخصص تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في مماسته المهنية
1.4.Provide patient care that appropriate, effective and compassionate for dealing with common health problems and health promotion using evidence-		إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص

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based and update information.		
1.5.Identify and share to solve health problems in forensic medicine and clinical toxicology.		تحديد المشكلات المهنية وإيجاد حلول لها
1.6.Acquire all competencies that enable him to provide safe, ethical and evidence based clinical care including use of new technology in forensic medicine and clinical toxicology.	critically evaluate the ethical and legal issues arising in forensic medical practice	إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته
		المهنية
1.7.Demonstrate interpersonal and communication skills that ensure effective information exchange with patients and their families and teamwork, as supervisor, and trainer in relation to colleagues, medical students and other health professions.	obtain highly developed communication skills in clinical consultations with victims of crime and offenders	التواصل بفاعلية والقدرة على على على المعمل على المعمل الم
1.8.Acquire decision making capabilities in different situations related to forensic medicine and clinical toxicology.		اتخاذ القرار في سياقات مهنية مختلفة
1.9.Show responsiveness to larger context of the health care system, including e.g. the organization of health care, partnership with health care providers and managers, practice of costeffective health care, health economics,		توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها

and resource allocations	
1.10.Be aware of public health and health policy issues and share in system-based improvement of health care.	إظهار الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة فى ضوء المتغيرات العالمية والاقليمية
1.11Show appropriate attitudes and professionalism.	التصرف بما يعكس الالتزام بالنزهة والمصداقية والالتزام بقواعد المهنة
1.12.Demonstrate skills of lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent	تنمية ذاته أكاديميا ومهنيا وقادرا على التعلم المستمر
stages in forensic medicine and clinical toxicology.	

# أ ـ المعرفة والفهم:

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الماجستير)
By the end of Master program, the candidate serecognize and understand the followings:  2.1.1.Principles and basic theories and concept in the	بأنتهاء دراسة برنامج الماجيستير يجب ان يكون الخريج على فهم ودراية بكل من:
field of Forensic science, clinical toxicology and related medical sciences.	2-1-1 النظريات والاساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة

2.1.2.Effect of medical practice of forensic medicine & clinical toxicology and its reflection on community (Candidates must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the medical system to provide optimal health care).	٢-١-٢- التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة
2.1.3.Recent advances in the field of Forensic medicine, clinical toxicology and related scientific branches.	٢-١-٣ التطورات العلمية في مجال التخصص
2.1.4.Ethical principles and medico-legal aspects of practice of clinical toxicology and forensic medicine as well as medical responsibility.	<ul> <li>٢-١-٤ المبادئ الاخلاقية والقانونية</li> <li>للممارسة المهنية في مجال التخصص</li> </ul>
2.1.5.Principles and basic concepts of quality in professional practice including planning and improvement of performance.	٢-١-٥ مبادئ واساسيات الجودة فى الممارسة المهنية فى مجال التخصص

2.1.6.Research	methodology	and	Ethics	of	medical	٢-١-٦ اساسيات واخلاقيات البحث العلمى
research.						

# ب ـ القدرات الذهنية:

المعايير الأكاديمية للبرنامج By the end of Master program, candidate should be	المعايير القياسية العامة (درجة (Generic) لبرامج الدراسات العليا (درجة الماجستير) بانتهاء دراسة برنامج الماجستير
<ul><li>able to recognize the followings:</li><li>2.2.1.Evaluation and interpretation data for proper diagnosis in the field of clinical toxicology and forensic medicine.</li></ul>	يجب ان يكون الخريج قادرا على: 2-1-1 تحليل وتقيم المعلومات في مجال التخصص والقياس عليها لحل المشاكل
2.2.2.Solving medical problems, in the absence of some administrative tools.	٢-٢-٢ حل المشاكل المتخصصة مع عدم توافر بعض المعطيات
2.2.3.Correlation between different scientific medical knowledge and their application in forensic medicine and clinical toxicology practice (Evidence-based medicine).	٢-٢-٣ الربط بين المعارف المختلفة لحل المشاكل المهنية
2.2.4.Designing and conducting scientific research, and research hypothesis.	۲-۲- ۱ اجراء دراسة بحثية او كتابة دراسة علمية منهجية حول مشكلة بحثية
2.2.5.Risk assessment in medical practice in forensic medicine and clinical toxicology.	٢-٢-٥ تقييم المخاطر في الممارسات المهنية في مجال التخصص
2.2.6.Planning for improvement of professional performance in the field of forensic medicine and clinical toxicology.	٢-٢-٢ التخطيط لتطوير الاداء في مجال التخصص
2.2.7.Decision making skills.	٢-٢-٧ اتخاذ القرارات المهنية في سياقات مهنية متنوعة

# ج. مهارات مهنية وعملية:

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الماجستير)
By the end of Master program, candidate should accessings skills:  2.3.1.Application of the basic and up to date Professional skills during practicing forensic medicine & clinical toxicology.	بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على : ٢-٣-١ اتقان المهارات المهنية الاساسية والحديثة في مجال التخصص
2.3.2.Writing and evaluating the different medical & medico-legal reports in the field of forensic medicine and clinical toxicology.	٢-٣-٢ كتابة وتقييم التقارير المهنية
2.2.3.Evaluation of medical care, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation.	٢-٣-٣ تقييم الطرق والادوات القائمة في مجال التخصص

# د . مهارات عامة و منتقلة :

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الماجستير)
By the end of Master program, candidate s accept the following skills:	يجب ان يكون الْخريج قادرا على :
2.4.1.Interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.	٢-٤-١ التواصل الفعال بأنواعة المختلفة
2.4.2.Effective use of Internet Technology and healthcare information system in medical practise and patient medical records.	<ul> <li>٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية</li> </ul>
2.4.3.Self-appraisal and needs evaluation.	٢-٤-٣ التقييم الذاتى وتحديد احتياجاته التعليمية
2.4.4.Use information by any means; in print or	٢-٤-٤ استخدام المصادر المختلفة لحصول

electronic format.	على المعلومات والمعارف
2.4.5.Incorporate formative evaluation feedback into daily practice.	۲-٤-٥ وضع قواعد ومؤشرات تقييم اداء الاخارين
2.4.6.Team work/leadership in different professional tasks.	٢-٤-٦ العمل في فريق سياقات كهنية مختلفة
2.4.7.Time management effectively.	٢-٤-٧ ادارة الوقت بكفاءة
2.4.8.Continuous Self-learning ability and medical education program participation.	٢-٤-٨ التعلم الذاتى والمستمر



# ملحق ٥: مصفو فة مضاهاة المعايير الأكاديمية للبرنامج و أهداف و نواتج تعلم البرنامج

أهداف	المعايير الأكاديمية للبرنامج (مواصفات الخريج):
البرنامج	
1.4.	1.1. Have the capability to be a scholar, understanding and applying basics, methods
1.4.	and tools of scientific research and clinical audit in forensic medicine and clinical
	toxicology.
1.1.	1.2.Appraise and utilize scientific knowledge to continuously update and improve
	clinical practice in forensic medicine and clinical toxicology.
1.1.	1.3.Acquire sufficient medical knowledge in the basic biomedical, clinical, behavioral
1.1.	and clinical sciences, medical ethics and medical jurisprudence and apply such
	knowledge in patient care in forensic medicine and clinical toxicology.
	1.4.Provide patient care that appropriate, effective and compassionate for dealing with
1.2.	common health problems and health promotion using evidence-based and update
	information.
	1.5.Identify and share to solve health problems in forensic medicine and clinical
1.1.	toxicology.
	toxicology.
1.2	1.6.Acquire all competencies that enable him to provide safe, ethical and evidence
1.3.	based clinical care including use of new technology in forensic medicine and clinical toxicology
<u> </u>	

	1.7.Demonstrate interpersonal and communication skills that ensure effective
1.5.	information exchange with individual patients and their families and teamwork, as
1.9.	supervisor, and trainer in relation to colleagues, medical students and other health
	professions.
	-
1.6	1.8.Acquire decision making capabilities in different situations related to forensic
1.6.	medicine and clinical toxicology.
1.7.	1.9.Show responsiveness to larger context of the health care system, including e.g. the organization of health care, partnership with health care providers and managers,
10,70	practice of cost-effective health care, health economics, and resource allocations
	1.10.Be aware of public health and health policy issues and share in system-based
1.7.	improvement of health care.
	•
1.8.	1.11Show appropriate attitudes and professionalism.
1.0.	
1.2	1.12.Demonstrate skills of lifelong learning and maintenance of competence and
1.3.	ability for continuous medical education and learning in subsequent stages in
	forensic medicine and clinical toxicology.
	Totaliste intention and chineur toxicology.

				البرناه							
	2.a.10	2.a.9	2.a.8	2.a.7	2.a.6	2.a.5	2.a.1.	المعايير الأكاديمية للبرنامج			
						<b>√</b>	<b>V</b>	1	1	1	By the end of Master program, the candidate should recognize and understand the followings:  2.1.1.Principles and basic theories and concept in the field of Forensic science, clinical toxicology and related medical

								sciences.
				<b>√</b>				2.1.2.Effect of medical practice of forensic medicine & clinical toxicology and its reflection on community (Candidates must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the medical system to provide optimal health care).
			4	$\vee$			18	
N T	7							2.1.3.Recent advances in the field of Forensic medicine, clinical toxicology and related scientific branches.
		√						2.1.4.Ethical principles and medico-legal aspects of practice of clinical toxicology and forensic medicine as well as medical responsibility.
			√					2.1.5.Principles and basic concepts of quality in professional practice including planning and improvement of performance.

	<b>√</b>					2.1.6.Research methodology and Ethics of medical research.

		<b>E</b>	البرنام						
			Inte	llect	ual s	kills			المعايير الأكاديمية للبرنامج
	2.b.8	2.b.7	2.b.6	2.b.5	2.b.4	2.b.3	2.b.2.	2.b.1.	المعايير الأكاديمية للبرنامج المهارات الذهنية
								7	By the end of Master program, candidate should be able to recognize the
									followings:
								X	2.2.1.Evaluation and interpretation data for proper diagnosis in the field of clinical toxicology and forensic medicine.
	<b>V</b>						V		2.2.2.Solving medical problems, in the absence of some administrative tools.
				1					2.2.3.Correlation between different scientific medical knowledge and their application in forensic medicine and clinical toxicology practice (Evidence-based medicine).
					V				2.2.4.Designing and conducting scientific research, and research hypothesis.
									2.2.5.Risk assessment in medical practice in forensic medicine and clinical toxicology.

		√					2.2.6.Planning for improvement of professional performance in the field of forensic medicine and clinical toxicology.
				√	<b>√</b>		2.2.7.Decision making skills.

				رنامج	علم البر	واتج ت	نر				
		Pra	act	ical/F	rofes	siona	ıl skil		م م م م م م م م م م م م م م م م م م م		
				2.c.7	2.c.6	2.c.5	2.c.4	2.c.3	2.c.2.	2.c.1.	المعايير الأكاديمية للبرنامج المهارات المهنية
T					4		7				
		T			<b>*</b>	1			2/4	1	By the end of Master program, candidate should accept the followings skills:  2.3.1.Application of the basic and up to date Professional skills during practicing forensic medicine & clinical toxicology.
					1		1	1	V		2.3.2.Writing and evaluating the different medical & medico-legal reports in the field of forensic medicine and clinical toxicology.
				√							2.2.3.Evaluation of medical care, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation.

				ىج	البرناه	ج تعلم	نوات		المعايير الأكاديمية للبرنامج			
G	lenei	ral ar	ıd tr	ansfe	erable	e skill						المهارات العامة والمنتقلة
				2.d.8	2.d.7	2.d.6	2.d.5	2.d.4	2.d.3	2.d.2.	2.d.1.	
						V	V					By the end of Master program, candidate should accept the following skills:
	-											2.4.1.Interpersonal and communication skills that result in the effective exchange of information and
											4	collaboration with patients, their families, and health professionals.
			F	1			FI.		4	1		2.4.2.Effective use of Internet Technology and healthcare information system in
	T						7			4		medical practise and patient medical records.
												2.4.3.Self-appraisal and needs evaluation.
												2.4.4.Use information by any means; in print or electronic format.
					V							2.4.5.Incorporate formative evaluation feedback into daily practice.
								√				2.4.6.Team work/leadership in different professional tasks.
												2.4.7.Time management effectively.
									√			2.4.8.Continuous Self-learning ability and medical education program participation.
												рагистраноп.

# ملحق (6) مصفوفة المعارف والمهارات للبرنامج الدراسى

	بف	I المعار	Know	ledg	e & I	J <b>nde</b> i	rstan	ding		ILOs	
a.10	a.9.	2.a.8	2.a.7	2.a.6	2.a.5	2.a.4	2.a.3	2.a.2	2.a.1		Courses & codes
										FORE601a	Occupational toxicology
										FORE601b	Forensic Chemistry &
											Analytical toxicology
										FORE602a	Pharmacology
	W.									FORE602b	Biochemistry
								1		FORE602c	Physiology
			1			6				FORE603	Clinical pathology
					J.	A Company				FORE604	Pediatric medicine
										FORE605	Forensic medicine
										FORE606a	Clinical toxicology
										FORE606b	General medicine

	هنية	مهارات ذ	Intelle	ctual S	Skills		ILOs		
2.b.8.	2.b.7	2.b.6	2.b.5	2.b.4	2.b.3	2.b.2	2.b.1		Courses & codes
								FORE601a	Occupational toxicology
								FORE601b	Forensic Chemistry & Analytical toxicology
								FORE602a	Pharmacology
								FORE602b	Biochemistry
								FORE602c	Physiology

				FORE603	Clinical pathology
				FORE604	Pediatric medicine
				FORE605	Forensic medicine
				FORE606a	Clinical toxicology
				FORE606b	General medicine

مهنية	، عملية و	F مهارات	Practi	ical &	Clin	ical S	Skills	ILOs	
	2.c.7.	2.c.6	2.c.5	2.c.4	2.c.3	2.c.2	2.c.1		Courses & codes
								FORE601a	Occupational toxicology
								FORE601b	Forensic Chemistry & Analytical toxicology
								FORE602a	Pharmacology
_								FORE602b	Biochemistry
			7	V				FORE602c	Physiology
6	TO V							FORE603	Clinical pathology
								FORE604	Pediatric medicine
		100						FORE605	Forensic medicine
								FORE606a	Clinical toxicology
								FORE606b	General medicine

	امة	مهارات ع	Gener	al and	l trans	ferable	e	ILOs	
2.d.8	2.d.7.	2.d.6	2.d.5	2.d.4	2.d.3	2.d.2	2.d.1		Courses & codes
								FORE601a	Occupational toxicology
								FORE601b	Forensic Chemistry & Analytical toxicology
								FORE602a	Pharmacology
								FORE602b	Biochemistry
								FORE602c	Physiology
								FORE603	Clinical pathology
								FORE604	Pediatric medicine

				FORE605	Forensic medicine
				FORE606a	Clinical toxicology
				FORE606b	General medicine

رئيس القسم التوقيع: ا.د: شيرين الخولى أستاذ المادة التوقيع





**Benha University** 

**Faculty of Medicine** 

**Department of Forensic Medicine and Clinical Toxicology** 

#### **Course Specifications**

**Course title:** General Toxicology.

Code: FORE & Toxi 601

**Academic Year (2020- 2021)** 

- Department offering the course: Forensic Medicine and clinical Toxicology
- Major or minor elements of the program: Major.
- Academic level: First part of the program
- Date of specification approval:
  - Department council: date: 8 / 9 /2020.
  - Faculty council date: 21 / 9 /2020.

### A) Basic Information:

- Allocated marks: 100 marks.
- Course duration: <u>15</u> weeks of teaching.
- Credit hours: <u>2</u> hours
- **Teaching hours:** <u>3</u> hours / week.

Method of teaching	Teaching Hours / week	<b>Total hours</b>
1- Lectures/ Seminars/ Case based learning/ Directed self-learning	1	15
2- Practical / Clinical	2	30
Total	3	45

# B) <u>Professional Information</u>:

# 1- Overall Aim of the Course:

- To provide scientific knowledge necessary for practicing clinical toxicology.
- •To provide practical and clinical skills necessary for proper dealing with intoxicated patient and to learn competencies necessary for continuous professional development.
- To provide the students with professional education and communication skills essential for establishing & maintaining good doctor/ patient relationship, appropriate attitudes with colleagues and para-medicals.

### 2- <u>Intended Learning Outcomes (ILOs)</u>:

#### 2.a. Knowledge and understanding:

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

- **2.a.1. Define** different general toxicological terminology.
- **2.a.2. State** general steps of management of intoxicated patient, methods of decontamination and enhanced elimination of toxin and antidotal therapy.
- **2.a.3. Explain** the mechanism of xenobiotics induced cardiac dysrhythmias and conduction abnormalities.
- **2.a.4.** *Illustrate* the role of diagnostic imaging in management of many toxicological emergencies and list the different imaging modalities that can be used (computed tomography; enteric and intravascular contrast studies; ultrasonography; transesophageal echocardiography; magnetic resonance imaging; etc.....).
- **2.a.5. Appraise** the toxicology laboratory testing in measuring the concentration of xenobiotics and other acutely toxic xenobiotics.
- **2.a.6.** *List* techniques used to prevent gastrointestinal absorption and the indication and contraindication of each technique.
- **2.a.7.** Classify pharmacokinetic and toxokinetic principles and classical versus physiologic compartment toxicokinetics.

- **2.a.8. Compare** between structure of important reactive species, biochemical and metabolic principles, neurotransmitters and neuromodulators and withdrawal principles.
- **2.a.9.** *Demonstrate* xenobiotic effect on thermoregulation, fluid, electrolyte and acid-base principles.
- **2.a.10.** *Enumerate* the physiologic changes during pregnancy that affect drug pharmacokinetics, pediatric perspective to the application of generally accepted toxicological principles and pathophysiologic disorders exacerbated by xenobiotics in the elderly.

#### 2.b. Practical Skills

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

- **2.b.1.** Write a primary toxicological report.
- **2.b.2. Perform** proper physical examination of the intoxicated patients.
- 2.b.3. Manage different toxicological cases, through the followings:
  Apply ABC (patent airway, breathing and circulation) for life saving of patients, Perform gastric lavage and Insert Ryle tube.
- 2.b.4. *Identify* toxicological laboratory tests.
- **2.b.5.** *Perform* bedside test to detect different toxins or confirm the diagnosis rapidly before lab result.

#### 2.c. Intellectual Skills:

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

- **2.c.1.** *Interpret* case scenario of clinical toxicology cases to put a proper plan for their management.
- **2.c.2. Differentiate** between similar cases of intoxication to formulate precise and accurate differential diagnosis of intoxicated cases.
- **2.c.3.** *Provide* a diagnostic approach necessary for proper diagnosis and management of intoxicated cases.
- **2.c.4.** *Interpret* ECG finding in clinical toxicology practice.

- **2.c.5. Analyze** different lab principles of intoxicated patient and formulate treatment plan.
- **2.c.6. Appraise** tests that can be conveniently performed at the bedside.
- **2.c.7.** *Establish* a proper technique to prevent GIT absorption in intoxicated patient.
- **2.c.8.** *Evaluate* fluid, electrolyte, and acid—base status in poisoned or overdosed patient.

#### 2.d. General and transferable Skills:

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

- **2.d.1. Establish** life-long self-learning required for continuous professional development.
- **2.d.2.** *Use* the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- **2.d.3. Retrieve**, manage, and manipulate information by all means, including electronic means.
- 2.d.4. Present information clearly in written, electronic and oral forms.
- 2.d.5. Establish effective interpersonal relationship to communicate ideas and arguments.

# 3- Course contents:

Subject	Lectures (hrs)	%	Practical (hrs)	%	Total (hrs)	% of Total
1- Initial evaluation of the patient: vital signs& Toxic syndrome.	1	6.7	3	10	4	8.9 %
2- Principles of managing poisoned or overdosed patients	1	6.7	4	13.3	5	11.1%
3- ECG principles	1	6.7	3	10	4	8.9 %

4- Diagnostic imaging	1	6.7	3	10	4	8.9%
5- Lab principles	1	6.7	3	10	4	8.9 %
6- Techniques used to prevent GITabsorption	2	13.3	6	20	8	17.8 %
7- Pharmaco kinetic& Toxokinetic principles	2	13.3			2	4.4
8- Biochemical Molecular basis:  *Chemical principles  *metabolic principles  *Neurotransmitters  *Withdrawal principles	2	13.3			2	4.4
9- Patho phyisiologic basis *Thermoregulatory principles *Fluid –Electrolyte& Acid base principles	2	13.3	3	10	5	11.1
10- Special population: *Reproductive& perinatal principles *Pediatric principles *Geriatric principles	2	13.3	5	16.7	7	15.6
TOTAL	15	100	30	100	45	100%

# 4- Teaching and learning methods:

# METHODS USED:

- 1. Modified lectures.
- 2. Seminars.
- 3. Directed self-learning.
- 4. Case based learning
- 5. Practical/clinical classes.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brainstorming, problem solving, etc)	2.a.12.a.10., 2.c.12.c.8 2.d.12.d.5

Case based learning	Case scenarios	2.a.12.a.10., 2.c.12.c.6 2.d.12.d.5
Directed self-learning.	Log book	2.a.12.a.10., 2.c.12.c.8 2.d.12.d.5
Seminars	Log book	2.a.12.a.10., 2.c.12.c.8 2.d.12.d.5
Practical classes	Toxicological reports, log book.	2.b.12.b.5

# 5- <u>Students Assessment methods</u>:

# 5-A) <u>ATTENDANCE CRITERIA</u>:

- 1. Lectures/seminars (at least 50% attendance).
- 2. Practical & clinical (at least 75% attendance).
- 3. Log book (practical reports & students activity).

# 5-B) Assessment TOOLS:

Tool Written examination:  • MCQs  • Case study  • Short essay  • True or false with explanation	Evidence Attached module of examination	Purpose (ILOs)  2.a.12.a.10., 2.c.12.c.8 2.d.12.d.5
Oral examination  Practical & clinical	Viva card system  Practical, clinical &	2.a.12.a.10., 2.c.12.c.8 2.d.12.d.5 2.b.12.b.5
examination [OSPE/OSCE]	Reports	2.0.12.0.3

# **5-C) TIME SCHEDULE**:

Exam	Week
1- Formative Assessments	8
2- Final exam	15

#### **FORMATIVE ASSESSMENT:**

• Student knows his marks after the Formative exams.

#### 5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
a- Written	50	50
b- Practical & Field	20	20
training		
<b>c-</b> Oral	20	20
d- Clinical	10	10
Total	100	100

#### 5-E) Examination description :

Examination	Description				
End semester:					
a- Written	Short assay, select (MCQs), & case study, true or				
b- Practical	false with explanations.				
c- Oral	Write reports and comments on specimens				
C= Ofai	Viva cards divided into in two sessions				
c- Oral	Two sessions (forensic and toxicology)				
3- Assignments & other activities	Round assignments, projects, log book etc.				

### **6- List of references:**

#### 6.1- Basic materials:

• Goldfrank's Manual of Toxicologic Emergencies: Hoffman, R.S.; Nelson, L.S.; Howland, M.A. et al. (eds.), McGraw-Hill Companies, New York, 9<sup>th</sup> ed., (2019).

#### 6.2- Essential books (textbooks):

• Poisoning & Drug Overdose. By: *Olson, K.R.* (ed.), Lange medical books/McGraw-Hill, New York, Chicago, Toronto, (2018).

#### 6.3- Recommended books:

- Goldfrank's Toxicologic Emergencies. By: Flomenbaum, N.E.; Goldfrank, L.R.; Hoffman, R.S., et al. (eds.), McGraw-Hill, New York, 8<sup>th</sup> ed., (**2016**).
- Clinical Toxicology. By: *Ford, M.D.; Delaney, K.A.; Ling, L.J. et al.* (eds.), W.B. Saunders Co., Philadelphia, 1<sup>st</sup> ed., (2011).

#### 6.4- Periodicals, Web sites, etc:

- -http://www.medscape.com.
- -http://www.pubmed.com.
- -http://www.master.emedicine.com/maint/cme.asp.
- -http://www.science direct.com.

# 7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lecture hall

- Department lectures halls: two

- Museum hall: SIXTH

floor

- Department lab.
- poison control unit (PCU).

مسمى المقرر السموم العامة

مصفوفة المعارف والمهارات المستهدفة من المقرر الدراسي جامعة/: بنها كلية / الطب البشرى قسم الطب الشرعى و السموم الاكلينيكية

	&TOXI 501	كود المقرر			
مهارات عامة	مهارات مهنیة	مهارات ذهنية	المعارف الرئيسة	أسبوع الدراسة	المحتويات للمقرر
2.d.1	2.b.1	2.c.3	2.a.1	1	1- Initial evaluation of the patient: vital signs& Toxic syndrome.
2.d.5	2.b.2 2.b.3	2.c.1 2.c.2	2.a.2	2	2- Principles of managing poisoned or overdosed patients
2.d.2	_	2.c.4	2.a.3	3	3- ECG principles

2.d.3	-	_	2.a.4	4	4- Diagnostic imaging
_	2.b.4 2.b.5	2.c.5 2.c.6	2.a.5	5	5- Lab principles
2.d.1	2.b.3	2.c.7	2.a.6	6,7	6- Techniques used to prevent GITabsorption
_	-	_	2.a.7	8,9	7- Pharmaco kinetic& Toxokinetic principles
			2.a.8	10.11	8- Biochemical& Molecular basis: *Chemical principles *metabolic
2.d.2				10,11	principles *Neurotransmitters *Withdrawal principles
_	_	2.c.8	2.a.9	12,13	9- Patho phyisiologic basis *Thermoregulatory principles *Fluid – Electrolyte& Acid base principles
_	2.b.2	_	2.a.10	14,15	10- Special population: *Reproductive& perinatal principles *Pediatric principles *Geriatric principles

Course coordinator: prof. Abdelmonem G.Madboly.

Head of Department: Prof. Sheren El-kholy.

Date: 8 September 2020





**Benha University** 

**Faculty of Medicine** 

**Department of Forensic Medicine and Clinical Toxicology** 

#### **Course Specifications**

Course title: Analytical toxicology

Code: Fore & Toxi 602

**Academic Year (2020–2021)** 

- **Department offering the course:** Forensic &toxicology department.
- Major or minor elements of the program: Major.
- Academic level: First part of the program.
- Date of specification approval:
  - Department council: date: \( \lambda / 9 / 202 \cdot \).
  - Faculty council date: 11/9/202.

# A) Basic Information:

- Allocated marks: <u>50 marks</u>.
- Course duration: \_\_\_\_\_\_ weeks of teaching.
- Credit hours: \_\_\_\_\_\tag{hour.}
- **Teaching hours:** <u>3</u> hours / week.

Method of teaching	<b>Teaching Hours / week</b>	Total hours
1- Lectures/ Seminars/ Case based learning/ Directed self-learning	1/ week	15
2- Practical / Clinical	2/ week	30
Total	3/week	45

# **B)** Professional Information:

# 1- Overall Aim of the Course:

- O To provide scientific knowledge of analytical toxicology and its applications in the clinical field.
  - To provide practical and clinical skills necessary for proper dealing with toxicological samples and the toxicological laboratory.
  - To provide the students with professional education and communication skills essential for establishing & maintaining good doctor/ patient relationship, appropriate attitudes with colleagues and para-medicals.

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

#### 2.a. Knowledge and understanding:

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

- **2.a.4. State** applications of analytical toxicology in drug abuse screening and therapeutic drug monitoring.
- **2.a.5.** List guidelines for collection of biological samples for analytical toxicology, clinical and forensic toxicological analysis.
- **2.a.6. Discuss** different test methods used in the toxicology laboratory.
- 2.a.7. Enumerate bed side Toxicological tests.

### 2.b. Practical Skills

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

- 2.b.1. Perform a drug screening test.
- **2.b.2.** *identify* methods of sampling and the techniques of toxicological analysis (Gas chromatography, HPLC, spectrophotometry, etc....)
- 2.b.3. Apply some common bed side toxicological tests.

#### 2.c. Intellectual Skills:

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

- **2.c.1.** *Interpret* the results of drug screening tests.
- **2.c.2. Differentiate** between different methods of sampling.

**2.c.3. classify** different methods of toxicological analysis and bed side tests.

#### 2.d. General and transferable Skills:

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

- **2.d.1. Establish** life-long self-learning required for continuous professional development.
- **2.d.2.** *Use* the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- **2.d.3.** *Retrieve*, manage, and manipulate information by all means, including electronic means.
- 2.d.4. Present information clearly in written, electronic and oral forms.

# 3- Course contents:

Subject	Lectures (hrs)	%	Practical (hrs)	%	Tota I (hrs)	% of Total
1- Over view and applications of analytical toxicology:	4	26.6	8	26.6	12	26.6%
2- Sampling:	4	26.6	8	26.6	12	26.6%
3- Different test methods used in the toxicology laboratory:	5	33.3	10	33.3	15	33.3%
4- Bed side Toxicological tests:	2	13.3	4	13.3	6	13.3%
TOTAL	15	100	30	100	45	100%

### 4- Teaching and learning methods:

#### **METHODS USED:**

- 6. Modified lectures.
- 7. Seminars.

- 8. Directed self-learning.
- 9. Case based learning

10.Practical/clinical classes.

Method	Evidence	ILOs
Modified	CDs of lectures including (video	2.a.12.a.4
lectures	films, brainstorming, problem	2.c.12.c.3
icctures	solving, etc)	2.d.12.d.4
Case	Case scenarios	a.12.a.4.2
based		c.12.c.3.2
learning		2.d.12.d.4
Directed	Log book	2.a.12.a.4
self-		2.c.12.c.3
learning.		2.d.12.d.4
Seminars	Log book	2.a.12.a.4
	The state of the s	2.c.12.c.3
		2.d.12.d.4
Practical	Toxicological reports, log book.	2.b.12.b.3
classes		

# 5- Students Assessment methods:

# 5-A) <u>ATTENDANCE CRITERIA</u>:

- 4. Lectures/seminars (at least 50% attendance).
- 5. Practical & clinical (at least 75% attendance).
- 6. Log book (practical reports & students' activity).

### 5-B) Assessment TOOLS:

Written examination:  • MCQs  • Case study  • Short essay  • True or false with explanation	Attached module of examination	2.a.12.a.4 2.c.12.c.3 2.d.12.d.4
Oral examination	Viva card system	2.a.12.a.4 2.c.12.c.3 2.d.12.d.4
Practical & clinical examination [OSPE/OSCE]	Practical, clinical & Reports	2.b.12.b.3

# **5-C)** TIME SCHEDULE:

Exam	Week
1- Formative Assessments	By the end of the 5 <sup>th</sup> week and the end of the 10 <sup>th</sup> week
2- Final exam	At the end of the 15 <sup>th</sup> week

# FORMATIVE ASSESSMENT:

• Student knows his marks after the Formative exams.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
e- Written	20	40%
f- Practical & Field	20	40%
training	10	20%
c- Oral		
Total	50	100%

# **5-E)** Examination description :

Examination	Description
End semester: d- Written	Short assay, select (MCQs), & case study, true or
e- Practical f- Oral	false with explanations. Write reports and comments on specimens(OSPE &OSCE)
c- Oral	Viva cards divided into in two sessions
	Two sessions (forensic and toxicology)

3- Assignments	&
other activities	

Round assignments, projects, log book... etc.

### 6- List of references:

- 6.1- Basic materials:
  - Department books by staff members
- 6.2- Essential books (textbooks):
  - Goldfrank's Manual of Toxicologic Emergencies: Hoffman, R.S.; Nelson, L.S.; Howland, M.A. et al. (eds.), McGraw-Hill Companies, New York, 9<sup>th</sup> ed. (2019).
  - Poisoning & Drug Overdose. By: *Olson, K.R.* (ed.), Lange medical books/McGraw-Hill, New York, Chicago, Toronto (2022)
- 6.3- Recommended books:
  - Clarke's Analytical Forensic Toxicology Clinical Toxicology. Adam Negrusz (ed.); Gail Cooper (ed.), Pharmaceutical Press, (2017).
  - Fundamentals of Analytical Toxicology: Robert J. Flanagan, Andrew Taylor, Ian D. Watson, Robin Whelpton (2020).
    - 6.4- Periodicals, Web sites, etc:
    - http://www.pubmed.com.
    - http://sciencedirect.com.

### 7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lecture hall
- Department lectures halls: two
- Museum hall: SIXTH

floor

- Department lab.

مصفوفة المعارف والمهارات المستهدفة من المقرر الدراسي جامعة/: بنها . كلية / .الطب البشري قسم.الطب الشرعي والسموم

مسمى المقرر السموم التحليلية

Fore& Toxi 602 كود المقرر

	مهارات عامة	مهارات مهنیة	مهارات ذهنية	المعارف الرئيسة	أسبوع الدراسة	المحتويات للمقرر	
	2.d.2	2.b.1	2.c.1	2.a.1	Week1,2	applications of analytical toxicology	
	2.d.2	2.b.1	2.c.1	2a1	Week3,4	Drug abuse .screening	
=	2.d.2	2.b.2	2.c.2	2.a.2	Week5	Sample requirements for general analytical toxicology	
						Guidelines for	
				7		collection of	
						biological samples for	
						analytical	
	2d2	2b2	2c2	2a2	Week6	toxicology	
						clinical and	
						forensic	
						toxicological	
						analysis	
	2d3	2b2	2c3	2a3	Week7,8	Screening methods	
						Methods of	
	2d3	2b2	2c3	2a3	Week9,10	confirmatory	
						.tests	
						Substances are	
						often not	
	2d3	2b2	2c3	2a3	Week11,12	detected by	
						toxicological	
Ĺ						.screens	

2d1	2b3	2c3	2a4	13,14,15	Bed side Toxicological
					tests

**Course coordinator:** 

**Head of Department: Prof. dr./Shereen El-Kholy** 

Date: September 2020





**Benha University** 

**Faculty of Medicine** 

**Department of Forensic Medicine and Clinical Toxicology** 

# **Course Specifications**

Code: FORE&TOXI 603
• Department offering the course: Forensic Medicine and Clinical Toxicology
Department
• Major or minor elements of the program Major element
Academic level: First partMaster degree
• Date of specification approval:
- Department council: date: 8 / 9 /2021 Faculty council date: / 9 /2021.
A) Basic Information:
• Allocated marks:50 marks.
• Course duration: (one semester)15 weeks of teaching.
• <b>Credit hours:</b> hours
• Teaching hours:hours / week.

Method of teaching	Teaching Hours / week	<b>Total hours</b>
1- Lectures/ Seminars/ Case based learning/ Directed self-learning	1/ week	15
2- Practical / Clinical	2 /week	30
Total	45	45

# **B) Professional Information:**

#### 1- Overall Aim of the Course:

- To provide scientific knowledge of DNA identification and analysis
- To provide scientific knowledge about quantity and quality of D.N.A samples
- o To provide scientific knowledge about Dactylography
  - To provide practical and clinical skills necessary for proper dealing with physical evidences

#### 2- <u>Intended Learning Outcomes (ILOs)</u>:

#### 2.a. Knowledge and understanding:

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

- 2.a.9. State general steps of identification of DNA sample
- 2.a.10. Explain procedure of DNA analysis
- 2.a.11. Discuss Procedure for determination quantity and quality of D.N.A
- 2.a.12. Enumerate different types of physical evidences
- **2.a.13.** List steps of identification of physical evidences.
- **2.a.14. Explain** methods of identification and analysis of each physical evidences
- **2.b.** Practical Skills: By the end of the course, students should be able to
- 2.b.1. *Identify* different types of physical evidences (blood, semen, saliva, hair, ......)
- 2.b.2. *Analyze* methods of sampling of different physical evidences in Forensic practice
- 2.b.3. *Analyze* different problems of interpretation of samples.
- **2.b.4.** *Interpret* common medicolegal implications associated with DNA typing.

#### 2.c. Intellectual Skills:

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

- **2.c.1.** *Correlate* between different physical evidences and different samples in case scenarios of forensic medicine to reach proper diagnosing of case.
- **2.c.2.** *Interpret* common medicolegal implications associated with DNA typing.
- **2.c.3.** *Analyze* different risks of interpretation of physical evidence collection and preservation.

#### 2.d. General and transferable Skills:

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

- **2.d.1. Establish** life-long self-learning required for continuous professional development.
- **2.d.2.** *Use* the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- 2.d.3. Retrieve, manage, and manipulate information by all means, including electronic means.
- 2.d.4. Present information clearly in written, electronic and oral forms.
- 2.d.5. Establish effective interpersonal relationship to communicate ideas and arguments.

#### **3- Course contents**

Subject	Lectures (hrs)	%	Practical (hrs)	%	Total (hrs)	% of Total
1- D.N.A Identification:	2	5	6	5	8	5 %
2- DNA analysis:	2	5	6	5	8	5 %
3- DNA Typing	2	10	6	10	8	10%
<b>4-</b> New advances in DNA:	2	5	-	-	2	5 %
5- Identification& types of physical evidence	4	10	6	15	10	10 %

6- Blood stain:	2	15	4	15	6	15 %
7- Seminal stain:	2	10	3	10	5	10 %
8- Hair	2	10	4	10	6	10%
9 -Urine stain Saliva Fecal stain Vaginal stain Teeth and bite marks	4	15	4	15	8	15%
10- Dactylography	4	10	4	10	8	10%
11- Non biological evidences	4	5	2	5	6	5%
TOTAL	30	100	45	100	75	100%

# 4- <u>Teaching and learning methods</u>: <u>METHODS USED:</u>

- 11. Modified lectures.
- 12.Seminars.
- 13.Directed self-learning.
- 14. Case based learning
- 15. Practical/clinical classes.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brainstorming, problem solving, etc)	2.a.12.a.6., 2.c.12.c.3 2.d.12.d.5
Case based learning	Case scenarios	2.a.12.a.6., 2.c.12.c.3 2.d.12.d.5
Directed self-learning.	Log book	2.a.12.a.6., 2.c.12.c.3 2.d.12.d.5
Seminars	Log book	2.a.12.a.6.,

		2.c.12.c.3 2.d.12.d.5
Practical classes	Toxicological reports, log book.	2.b.12.b.4

#### 5- <u>Students Assessment methods</u>:

#### **5-A) ATTENDANCE CRITERIA**:

- 7. Lectures/seminars (at least 50% attendance).
- 8. Practical & clinical (at least 75% attendance).
- 9. Log book (practical reports & students activity).

#### 5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination:      MCQs     Case study     Short essay     True or false with explanation	Attached module of examination	2.a.12.a.6., 2.c.12.c.3 2.d.12.d.5
Oral examination	Viva card system	2.a.12.a.6., 2.c.12.c.3 2.d.12.d.5
Practical & clinical examination [OSPE/OSCE]	Practical, clinical & Reports	2.b.12.b.4

# **5-C)** TIME SCHEDULE:

Exam	Week
1- Formative Assessments	
2- Final exam	

#### **FORMATIVE ASSESSMENT:**

• Student knows his marks after the Formative exams.

#### 5-D) Weighting System:

<b>Examination</b> 1	Marks allocated	% of Total Marks
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g- Written	20	40%
h- Practical & Field	20	40%
training		
c- Oral	10	20%
Total	50	100%

### 5-E) Examination description :

Examination	Description	
End semester:		
g- Written	Short assay, select (MCQs), & case study, true or	
h- Practical i- Oral	false with explanations.  Write reports and comments on specimens  Viva cards divided into in two sessions	
c- Oral	Two sessions (forensic and toxicology)	
3- Assignments &	Round assignments, projects, log book etc.	
other activities		

# 6- <u>List of references</u>:

- 6.1- Basic materials:
  - Department books by staff members
- 6.2- Essential books (textbooks):
- Simpsons Forensic Medicine, 14th edition pdf, 2019.
- DiMaio Forensic Pathology, 2021
- 6.3- Periodicals, Web sites, etc:
  - http://www.pubmed.com.
  - http://sciencedirect.com.

# 7- <u>Facilities required for teaching and learning:</u>

Facilities used for teaching this course include:

- Faculty lecture hall
- Department lectures halls: two
- Museum hall: SIXTH

floor

- Department lab.

# مصفوفة المعارف والمهارات المستهدفة من المقرر الدراسي جامعة/: ..... علية / ..... قسم

كمياء طبية شرعية	مسمى المقرر
: FORE&TOXI 603	كود المقرر

	003				
مهارات عامة	مهارات مهنية	مهارات ذهنية	المعارف الرئيسة	أسبوع الدراسة	المحتويات للمقرر
2.d.12. d.6	2.b.4	2.c.2	2.a.1,2.a.2,2.a.3	الاسبوع الاول والتاني	DNA
2.d.12. d.6	2.b.1, 2.b.2	2.c.1,2.c. 3	2.a.4,2.a.5,2.a.6	الاسبوع الثالث و الرابع	BIOLOGICAL EVIDENCE
2.d.12. d.6	2.b.1, 2.b.2,2.b.3	2.c.1,2.c.	2.a.4,2.a.5,2.a.6	الاسبوع الخامس والسادس	BLOOD
2.d.12. d.6	2.b.1, 2.b.2,2.b.3	2.c.1,2.c. 3	2.a.4,2.a.5,2.a.6	الاسبوع السابع	SEMEN
2.d.12. d.6	2.b.1, 2.b.2, 2.b.3	2.c.1,2.c. 3	2.a.4,2.a.5,2.a.6	الاسبوع الثامن	HAIR
2.d.12. d.6	2.b.1, 2.b.2,2.b.3	2.c.1,2.c.	2.a.4,2.a.5,2.a.6	الاسبوع التاسع و العاشر	URINE, SALIVA,
2.d.12.d.6	2.b.1, 2.b.2,2.b.3	2.c.1,2.c. 3	2.a.4,2.a.5,2.a.6	الاسبوع الحادی عشر والاثنی عشر والثالث عشر	DACTYLOGRAPHY
2.d.1.2.d.6	2.b.1, 2.b.2, 2.b.3	2.c.1,2.c. 3	2.a.4,2.a.5,2.a.6	الاسبوع الرابع عشر والخامس عشر	NON BIOLOGICAL EVIDENCE

**Course coordinator:** 

Head of Department: Date:	Prof. September	2020
	YA	





**Benha University** 

**Faculty of Medicine** 

**Department of Forensic Medicine and Clinical Toxicology** 

#### **Course Specifications**

Course title: Medical Ethics Code: FORE & TOXI 604

**Academic Year (2020-2021)** 

- Department offering the course: forensic medicine & clinical toxicology.
- Major or minor elements of the program: Major.
- Academic level: First part of the program.
- Date of specification approval:

- Department council: date: 8/9/2020.

- Faculty council date: 21/9/2020.

# A) Basic Information:

• Allocated marks: 100 marks.

• Course duration: 15 weeks of teaching.

• **Credit hours:** 2 hours.

• **Teaching hours:** 2 hours / week.

Method of teaching	Teaching Hours / week	Total hours
Lectures/ Seminars/ Case based learning/ Directed self-learning	2/ week	30
Total	2/ week	30

# **B) Professional Information:**

# 1- Overall Aim of the Course:

o To provide basic scientific knowledge of medical ethics.

- To provide essential practical and clinical skills necessary for proper dealing with ethical problems.
- To provide the students with professional education and communication skills essential for establishing & maintaining good doctor/ patient relationship, appropriate attitudes with colleagues and para-medicals.
  - To introduce of the basic facts of medical ethics for the medical students.
  - To provide appropriate ethical and professional education necessary for establishment of good communication with patients and colleagues.

### 2- <u>Intended Learning Outcomes (ILOs)</u>:

#### 2.a. Knowledge and understanding:

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

- 2.a.15. List principles of medical ethics.
- **2.a.16. Discuss** requirements for informed consent.
- **2.a.17. Enumerate** aspects of medical confidentiality and confidentiality disclosure.
- **2.a.18.** *Identify* ethical issues for biochemical research.
- 2.a.19. Discuss Doctor/Patient relationship.
- **2.a.20.** *Illustrate* medical neglicance and malpractice.
- **2.a.21. Explain** aspects of euthanasia.
- **2.a.22. Discuss** ethical dilemma.

#### 2.c. Intellectual Skills:

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

- **2.c.1.** *Interpret* case scenario of principles of medical ethics.
- 2.c.2. Design an informed consent
- **2.c.3. Analyse** Ethical issues for biochemical research
- **2.c.4. Differentiate** between similar cases of Medical neglicance and Malpractice.

#### 2.c.5. Design an informed consent

#### 2.d. General and transferable Skills:

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

- **2.d.1. Establish** life-long self-learning required for continuous professional development.
- **2.d.2.** *Use* the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- **2.d.3.** *Retrieve*, manage, and manipulate information by all means, including electronic means.
- 2.d.4. Present information clearly in written, electronic and oral forms.
- 2.d.5. Establish effective interpersonal relationship to communicate ideas and arguments.

#### **3-** Course contents:

Subject	Lectur es (hrs)	%	Total (hrs)	% of Total
1- Principles of medical ethics.	6	20	6	20 %
2- Consent.	3	10	3	10 %
3-Medical Confidentiality.	3	10	3	10 %
4- Confidentiality disclosure.	3	10	3	10 %
5-Ethical issues for biochemical research.	3	10	3	10 %
6- Doctor/Patient relationship.	3	10	3	10 %
7-Medical neglicance and Malpractice.	3	10	3	10 %
8-Euthanasia.	3	10	3	10 %
9-Ethical dilemma.	3	10	3	10 %
TOTAL	30	100	30	100%

# 4- <u>Teaching and learning methods</u>: *METHODS USED:*

- 16. Modified lectures.
- 17. Seminars.
- 18.Directed self-learning.
- 19.Case based learning
- 20. Practical/clinical classes.

Method	Evidence	ILOs
Modified	CDs of lectures including (video	2.a.12.a.8
lectures	films, brainstorming, problem	2.c.12.c.4
lectures	solving, etc)	2.d.12.d.5
Case	Case scenarios	2.a.12.a.8
based		2.c.12.c.4
learning		2.d.12.d.5
Directed	Log book	2.a.12.a.8
self-		2.c.12.c.4
learning.		2.d.12.d.5
Seminars	Log book	2.a.12.a.8
		2.c.12.c.4
		2.d.12.d.5
Practical	Toxicological reports, log book.	2.b.12.b.4
classes		

# **5- <u>Students Assessment methods</u>**:

# 5-A) <u>ATTENDANCE CRITERIA</u>:

- 10.Lectures/seminars (at least 50% attendance).
- 11. Practical & clinical (at least 75% attendance).
- 12.Log book (practical reports & students activity).

# **5-B)** Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination:  MCQs Case study Short essay True or false with explanation	Attached module of examination	2.a.12.a.4 2.c.12.c.4 2.d.12.d.5

Oral examination	Viva card system	2.a.12.a.4
		2.c.12.c.4
		2.d.12.d.5

#### **5-C)** TIME SCHEDULE:

Exam	Week		
	By the end of 5 <sup>th</sup> week		
	By the end of 10 <sup>th</sup> week		
2- Final exam	15 <sup>TH</sup> week		

#### **FORMATIVE ASSESSMENT:**

• Student knows his marks after the Formative exams.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks			
i- Written	50	50			
b- Oral	50	50			
		2			
Total	100	100			

# 5-E) Examination description:

Examination	Description
End semester:	
j- Written	Short assay, select (MCQs), & case study, true or false with explanations.
k- Oral	Viva cards divided into in two sessions
c- Oral	Two sessions (forensic and toxicology)
3- Assignments & other activities	Round assignments, projects, log book etc.

# 6- <u>List of references</u>:

#### 6.1 - Basic materials:

- Department books by staff members
- seminars of medical ethics

# **6.2-** Essential books (textbooks):

• Furlong, E. (Ed.). (2018). Health Care Ethics. Jones & Bartlett Learning.

#### 6.3- Recommended books:

• Loewy, E. H. (2013). Textbook of Medical Ethics. Springer Science & Business Media.

#### 6.4- Periodicals, Web sites, etc:

- http://www.pubmed.com.
- http://sciencedirect.com.

### 7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lecture hall
- Department lectures halls: two
- Museum hall: SIXTH

floor

- Department lab.

Medical ethics

# مصفوفة المعارف والمهارات المستهدفة من المقرر الدراسي جامعة/: بنها كلية / الطب البشري قسم/ الطب الشرعي والسموم الاكلينيكية

مسمى المقرر

1	ORE & TO	XI 604	كود المقرر	2	
	مهارات عامة	مهارات ذهنية	المعارف الرئيسة	أسبوع الدراسة	المحتويات للمقرر
	2.d.2	2.c.1	2.a.1	1 <sup>st</sup> , 2 <sup>nd</sup> week	1- Principles of medical ethics.
	2.d.4	2.c.2	2.a.2	4 <sup>th</sup> week	2- Consent.
	2.d.1		2.a.3	5 <sup>th</sup> week	3-Medical Confidentiality.
	2.d.1		2.a.3	6 <sup>th</sup> week	4- Confidentiality disclosure.
	2.d.2	2.c.3	2.a.4	7 <sup>th</sup> , 8 <sup>th</sup> week	5-Ethical issues for biochemical research.

			9 <sup>th</sup> ,	6- Doctor/Patient relationship.
2.d.5		2.a.5	$10^{th}$	
			week	
			11 <sup>th</sup> ,	7-Medical neglicance and Malpractice.
2.d.2	2.c.4	2.a.6	$12^{th}$	Waipractice.
			week	
			13 <sup>th</sup> ,	8-Euthanasia.
2.d.1		2.a.7	$14^{th}$	
			week	
2.11		2 0	15 <sup>th</sup>	9-Ethical dilemma.
2.d.1		2.a.8	week	

**Course coordinator:** 

**Head of Department:** Prof. Shereen Elkholy

Date: September 2020





**Benha University** 

**Faculty of Medicine** 

**Department of Forensic Medicine and Clinical Toxicology** 

.5 hr / week

1 hr\week

1.5

12

21

#### **Course Specifications**

**Academic Year** (2021 – 2022)

الباثولوجيا فيما يخص الطب الطب الطب الباثولوجيا فيما يخص

Code: FORE&TOXI 605.....

....الشرعي

1- Lectures/ Seminars/ Case based

Total

learning/ Directed self-learning

2- Practical

• Department offering the course:Forensic medicine and Clinical
Toxicology
• Major or minor elements of the program:minor
• Academic level: First part or second part of the programFirst
partof Master degree
• Date of specification approval:
- Department council: date: ^/9/2021. - Faculty council date: ^//9/2020.
A) Basic Information:
• Allocated marks:50 marks.
• Course duration:15 weeks of teaching.
• Credit hours:hours
• Teaching hours:hours / week.
Method of teaching

#### **B) Professional Information:**

#### 1- Overall Aim of the Course:

- -To familiarize students with fundamental bases of disease processes.
- -To provide scientific knowledge of pathological changes associated with different diseases and toxins.
- To provide the students with knowledge concerning definition, causes, mechanisms of disease development
- -To provide the students with knowledge about alteration of structure "morphological changes", functional changes, and complications of diseases in different body systems.
- -To provide practical and clinical skills necessary for proper dealing with pathological changes associated with different diseases and toxins.
- To provide the students with professional education and communication skills essential for establishing & maintaining good doctor/ patient relationship, appropriate attitudes with colleagues and para-medicals.

# 2- Intended Learning Outcomes (ILOs):

#### 2.a. Knowledge and understanding:

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

- 2.a.1. Discuss the main disease categories that may affect the body (general pathology) as well as the basic mechanisms underlying these disorders (etiology, pathogenesis & natural history).
- 2.a.2 Identify pathological changes caused by radiation
- 2.a.3 List pathological changes of sudden death in infant and adult.
- 2.a.4 Mention the fate & complications of the diseases related to medicolegal cases and outline the general management procedures.
- 2.a.5. Describe the morphologic (gross & microscopic) changes occurring because of such disease processes in cardiovascular system.
- 2.a.6 Describe the morphologic (gross & microscopic) changes occurring because of such disease processes in central nervous system.
- 2.a.7 Describe the morphologic (gross & microscopic) changes occurring because of such disease processes in respiratory system.
- 2.a.8 Describe the morphologic (gross & microscopic) changes occurring because of such disease processes in gastro intestinal system.
- 2.a.9 state pathological changes caused by drugs causing tubulointersitial nephritis.

- 2.a.10 Explain pathological changes in deaths related to pregnancy.
- 2.a.11 Recognise different types of fracture and its repair.
- 2.a.12 Illustrate pathological changes caused by therapeutic drugs and drug of abuse.

#### 2.b. Practical Skills

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

- 2.b.1.. Diagnose different forensic and toxicological conditions depending on pathological finding.
- 2.b.2. Write reports on the different macroscopic and microscopic pathological specimens.
- 2.b.3 . Utilize the obtained pathological information to solve forensic and toxicological problems.

#### 2.c. Intellectual Skills:

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

- 2.c.1. Interpret different autopsy findings on pathological basis
- **2.c.2. Analyze** case scenario of diseases leading to death and their clinical, pathogenesis, morphological, complication aspects
  - **2.c.3.** Identify pathological changes in different organs

#### 2.d. General and transferable Skills:

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

- **2.d.1. Establish** life-long self-learning required for continuous professional development.
- **2.d.2.** *Use* the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

- **2.d.3. Retrieve**, manage, and manipulate information by all means, including electronic means.
- 2.d.4. Present information clearly in written, electronic and oral forms.
- 2.d.5. Establish effective interpersonal relationship to communicate ideas and arguments.

# 3- Course contents: :

Subject	Lectures	0/	Practic		Total	% of
	(hrs)	%	al (hrs)	%	(hrs)	Total
1-General pathology:	2	22.2	1	16.6	3	20 %
2-cardiovascular system:	1.5	16.7	1	16.7	2.5	16.6 %
3-CNS:	1.5	16.7	1	16.7	2.5	16.6 %
4-Respiratory system:	1	11.1	1	16.7	2	13.4 %
5-Gastrointestinal and urinary system:	1	11.1	1	16.7	2	13.4%
6-female genital system and bones:	1	11.1	.5	8.3	1.5	10 %
7- pathological changes due to injury by therapeutic drugs and drug of abuse	1	11.1	.5	8.3	1.5	10%
TOTAL	9	100	6	100	15	100%

# 4- Teaching and learning methods:

#### **METHODS USED:**

- 21. Modified lectures.
- 22.Seminars.
- 23. Directed self-learning.
- 24. Case based learning
- 25. Practical/clinical classes.

Method	Evidence	ILOs

Modified lectures	CDs of lectures including (video films, brainstorming, problem solving, etc)	2.a.12.a.12., 2.c.12.c.3 2.d.12.d.4
Case based learning	Case scenarios	2.a.12.a.12., 2.c.12.c.3 2.d.12.d.4
Directed self-learning.	Log book	2.a.12.a.12., 2.c.12.c.3 2.d.12.d.4
Seminars	Log book	2.a.12.a.12., 2.c.12.c.3 2.d.12.d.4
Practical classes	Pathology reports, log book.	2.b.12.b.3

#### 5- <u>Students Assessment methods</u>:

# 5-A) ATTENDANCE CRITERIA:

- 13.Lectures/seminars (at least 50% attendance).
- 14.Practical & clinical (at least 75% attendance).
- 15.Log book (practical reports & students activity).

# 5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination:      MCQs     Case study     Short essay     True or false with explanation	Attached module of examination	2.a.12.a.12. 2.c.12.c.3 2.d.12.d.4
Oral examination	Viva card system	2.a.12.a.12. 2.c.12.c.3 2.d.12.d.4
Practical [OSCE]	Practical, clinical & Reports	2.b.12.b.3

# **5-C)** TIME SCHEDULE:

-by the end of 5 <sup>th</sup> week	
week	

#### **FORMATIVE ASSESSMENT:**

• Student knows his marks after the Formative exams.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
j- Written	20	40%
k- Practical	20	40%
<b>l-</b> Oral	10	20%
Total	50	100%

#### 5-E) Examination description:

Examination	Description			
End semester:				
l- Written m- Practical n- Oral	Short assay, select (MCQs), & case study, true or false with explanations.  Write reports and comments on specimens  Viva cards divided into in two sessions			
c- Oral	Two sessions (forensic and toxicology)			
3- Assignments & other activities	Assignments, projects, log book etc.			

# 6- <u>List of references</u>:

- 6.1 Basic materials:
  - Department books by staff members :theoretical,museum and histopathology
- 6.2- <u>Essential books (textbooks)</u>:Robbins basic pathology (10<sup>th</sup> edition) 2017

# 6.3- Recommended books:

Basic pathology of Kumar, Cortan and Robbins

- 6.4- Periodicals, Web sites, etc:
  - http://www.pathmax.com.
  - <a href="http://sciencedirect.com">http://sciencedirect.com</a>.

# **7- <u>Facilities required for teaching and learning:</u>** Facilities used for teaching this course include:

- Faculty lecture hall

- Department lectures halls: two

- Museum hall: seventh

floor

- Department lab.

الدراسي	المقرر	هدفة من	المسته	المهارات	المعارف و	مصفوفة	
قسمالطب الشرعى	•••••	البشرى	/ الطب	كلية			جامعة/:
				••••		الإكلينيكية	والسموم

	الباثولوجي	مسمى المقرر
	FORE & TOXI	كود المقرر
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005					
مهارات عامة	مهارات مهنية	مهارات ذهنية	المعارف الرئيسة	أسبوع الدراسة	لمحتويات للمقرر
2.d.1 2.d.2 2.d.3 2.d.4	2.b.1	2.c.1 2.c.2 2.c.3	2.a.1 2.a.2 2.a.3 2.a.4	1-5	Genera Pathology
2.d.1 2.d.2 2.d.3 2.d.4	2.b.2 2.b.3	2.c.1 2.c.2 2.c.3	2.a.5	6,7	C.V.:
2.d.1 2.d.2 2.d.3 2.d.4	2.b.2 2.b.3	2.c.1 2.c.2 2.c.3	2.a.6	8,9	CN:

Respirator system	10	2.a.7	2.c.1	2.b.2 2.b.3	2.d.1 2.d.2 2.d.3 2.d.4
GIT	11	2.a.8	2.c.1 2.c.2 2.c.3	2.b.2 2.b.3	2.d.1 2.d.2 2.d.3 2.d.4
Urinary trac	12	2.a.9	2.c.1 2.c.2 2.c.3	2.b.2 2.b.3	2.d.1 2.d.2 2.d.3 2.d.4
Female genita	13	2.a.10	2.c.1 2.c.2 2.c.3	2.b.2 2.b.3	2.d.1 2.d.2 2.d.3 2.d.4
bone	14	2.a.11	2.c.1 2.c.2 2.c.3	2.c.1 2.c.2 2.c.3	2.d.1 2.d.2 2.d.3 2.d.4
Pathologica changes due to Toxicological causes	15	2.a.12	2.c.1 2.c.2 2.c.3		2.d.1 2.d.2 2.d.3 2.d.4

**Course coordinator:** 

Head of Department: Prof.

Date: September 2020





**Benha University** 

**Faculty of Medicine** 

**Department of Forensic Medicine and Clinical Toxicology** 

#### **Course Specifications**

Course title: الباطنه العامه

Code: FORE and TOXI 606

**Academic Year** (2020–2021)

- Department offering the course: internal medicine
- Major or minor elements of the program: minor
- Academic level: First part or second part of the program : first part of master
- Date of specification approval:
  - Department council: date: \(\lambda / 9 / 2020.\)
  - Faculty council date: 11/9/2020.

# A) Basic Information:

- Allocated marks: 100 marks.
- Course duration: 15 weeks of teaching.
- Credit hours: <u>2</u> hours
- **Teaching hours:** 3 \_\_\_\_hours / week.

Method of teaching	Teaching Hours / week	Total hours
1- Lectures/ Seminars/ Case based learning/ Directed self-learning	1h/ week	15
2- Practical / Clinical	2h/ week	30
Total	3h/ week	45

# **B)** Professional Information:

# 1- Overall Aim of the Course:

- To provide good scientific knowledge about common medical diseases in studied medical branches (cardiovascular-respiratory-gastrointestinal- etc.....)
- To accept clinical skills how to take history of the patient how to examine different systems of the body with stress on data help in diagnosis.

# 2- Intended Learning Outcomes (ILOs):

### 2.a. Knowledge and understanding:

#### By the end of the course, students should be able to:

- 2.a.1 Discuss causes and mechanisms of sudden unexpected deaths, the methods used in their diagnosis and their medicolegal importance.
- 2.a.2 Define different nephrotoxic and hepatotoxic agents.
- 2.a.3 Explain different pathological lesions that could be detected during autopsy.
- 2.a.4 Explain basis scientific knowledge about diagnosis of toxicological cases.
- 2.a.5 Enumerate the principles that govern ethical decision making in clinical practice as well as the medicolegal aspects of medical malpractice.
- 2.a.6 Discuss the pathology of different diseases which help us in decision making in cases of sudden natural deaths.
- 2.a.7 evaluate the signs and symptoms of different toxicological cases and how to differentiate between them and other medical conditions.
- 2.a.8 causes of sudden cadiac arrest and brain death.
- 2.a.9 demonstrate symptom and sign and drug caused heart failure and how to differentiate between them and respiratory system.
- 2.a.10 diferentiate between cardogenic and non cardogenic pulmonary edema.
- 2.a.11 discuss types of shock.
- 2.a.12 discuss general approach management of toxic coma.
- 2.a.13 descripe epileptical fits and drug causing it.
- 2.a.14 demonstrate different between mecury and lead toxicity.
- 2.a.15 assemble causes of intracranial hemorrhage.

#### .b. Practical Skills

# By the end of the course, students should be able to:

- 2.b.1. Diagnose the toxic coma and differentiate between it and other medical causes of coma.
- 2.b.2. Perform physical examination of different systems successfully.
- 2.b.3. Take a detailed medical history of patients.

- 2.b.4. Establish different investigatory tools that help us in their practical field.
- 2.b.5. Perform the different technical skills essential for diagnosis and management of toxicological cases.
- 2.b.6 examine patient with cardiovascular diseases and respiratory diseases.
- 2.b.7 diagnose true epileptical fits.

#### 2.c. Intellectual Skills:

#### By the end of the course, students should be able to:

- 2.c.1. Interpret the clinical and investigational database to be proficient in clinical problem solving.
- 2.c.2. Analyze different technical skills that could help us during diagnosis of different toxicological cases.
- 2.c.3. Demonstrate the most appropriate and cost effective diagnostic procedures for each problem.
- 2.c.4. Analyze case scenarios to set an approach to solve clinical problems.

#### 2.d. General and transferable Skills:

#### By the end of the course, students should be able to:

- 2.d.1. Manage effectively as a member or a leader of an interdisciplinary team.
- 2.d.2. Maintain the rules & regularities for evaluation of performance of others.
- 2.d.3. Utilize life-long self-learning required for continuous professional development
- 2.d.4. Utilize the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- 2.d.5. Retrieve, manage, and manipulate information by all means, including electronic means.
- 2.d.6. Manage Learning plan to others & test their performance.

# 3 Course contents:

Subject	Lectures (hrs)	%	Practical (hrs)	%	Total (hrs)	% of Total
CVS: Symptoms & Sign of C.V diseases. Examinations& Investigations. HEART FAILUR-dysrhythmia	3	20	5	16. 6	8	17.7 %
RESPIRATORY SYSTEM: Symptoms & Sign of Respiratory diseases. Examinations & Investigations. Drug and Toxins induce respiratory failure.	3	20	5	16. 6	8	17.7%

TOTAL	15	100	30	100	45	100%
Heavy metal	2	13.3	5	16.7	7	15.6
Eplipsy Hemorrhage						
CNS	2	13.3	5	16.7	7	15.6%
Hepatic failure	1	6.6	3	10	4	8.9 %
RENAL FAILURE:	1	6.6	2	6.6	3	6.7%
ICU -SHOCK -BRAIN DEATH -COMA	3	20	5	16. 6	8	17.7%
Pulmonary edema.						

# 4- <u>Teaching and learning methods</u>:

# METHODS USED:

- 1. Modified lectures.
- 2. Seminars.
- 3. Directed self-learning.
- 4. Case based learning
- 5. Practical and clinical classes.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brainstorming, problem solving, etc)	2.a.12.a.15., 2.c.12.c.4 2.d.12.d.6
Case based learning	Case scenarios	2.a.12.a.15., 2.c.12.c.4 2.d.12.d.6
Directed self-learning.	Log book	2.a.12.a.15., 2.c.12.c.4 2.d.12.d.6
Seminars	Log book	2.a.12.a.15., 2.c.12.c.4

		2.d.12.d.6
Practical and clinical classes	Toxicological reports, log book.	2.b.12.b.7

#### **5- Students Assessment methods:**

# **5-A) ATTENDANCE CRITERIA**:

- 1. Lectures/seminars (at least 50% attendance).
- 2. Practical & clinical (at least 75% attendance).
- 3. Log book (practical reports & students activity).

#### 5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination:  MCQs Case study Short essay True or false with explanation	Attached module of examination	2.a.12.a.15., 2.c.12.c.4 2.d.12.d.6
Oral examination	Viva card system	2.a.12.a.15., 2.c.12.c.4 2.d.12.d.6
Practical & clinical examination [OSPE/OSCE]	Practical, clinical & Reports	2.b.12.b.7

# **5-C)** TIME SCHEDULE:

Exam	Week
1- Formative Assessments	By the end of 3 <sup>th</sup> week
	By the end of 6 <sup>th</sup> week
	BY the end of 10th week
2- Final exam	By the end of 15 <sup>th</sup> week

#### **FORMATIVE ASSESSMENT:**

• Student knows his marks after the Formative exams.

#### 5-D) Weighting System:

Examination	Marks allocated	% of Total Marks

a- Written	50	50
b- Practical & Field	25	25
training	25	25
c- Oral		
Total	100	100

#### 5-E) Examination description :

Examination	Description
End semester:	
a- Written	Short assay, select (MCQs), & case study, true or
b- Practical c- Oral	false with explanations. Write reports and comments on specimens Viva cards divided into in two sessions
c- Oral	Two sessions (forensic and toxicology)
3- Assignments &	Round assignments, projects, log book etc.
other activities	

#### 6- List of references:

- 6.1- Basic materials:
  - Department books by staff members
- 6.2- Essential books (textbooks):

Davidson's Principles and Practice of Medicine, 22st Edition, By Nicki R. College, BSc, FRCP(Ed), Brian R. Walker, BSc, MD, FRCP(Ed), 2018 Kumar and Clark's Clinical Medicine, by Kumar & Clark - 9th Edition, 2016.

#### 6.3- Recommended books:

Oxford Textbook of Medicine, by David A. Warrell (Author), Timothy M. Cox (Author), John D. Firth (Author) -Edition: 5<sup>th</sup>, 2010.

- 6.4- Periodicals, Web sites, etc:
  - http://www.pubmed.com.
  - http://sciencedirect.com.

#### 7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lecture hall
- Department lectures halls: two
- Museum hall: SIXTH

floor

- Department lab.

# مصفوفة المعارف والمهارات المستهدفة من المقرر الدراسي جامعة/:بنها. كلية / طب بشري قسم/ الطب الشرعي والسموم الاكلينيكيه

الباطنه العامه	مسمى المقرر
٦٠٦	كود المقرر

مهارات عامة	مهارات مهنية	مهارات ذهنية	المعارف الرئيسة	أسبوع الدراسة	المحتويات للمقرر
2.d.1 2.d.2 2.d.3 2.d.4	2.b.2 2.b.3 2.b.4 2.b.6	2.c.1 2.c.3 2.c.4	2.a.3 2.a.6 2.a.7 2.a.8 2.a.9		Cvs system
2.d.1 2.d.2 2.d.3 2.d.4	2.b.2 2.b.3 2.b.4 2.b.6	2.c.1 2.c.2	2.a.7 2.a.9 2.a.10		Respiratory system
2.d.1 2.d.2 2.d.3	2.b.1	2.c.2	2.a.1 2.a.8 2.a.11 2.a.12		ICU
2.d.1 2.d.2 2.d.3	2.b.2 2.b.3 2.b.4	2.c.2	2.a.2		Renal system
2.d.1 2.d.2 2.d.3	2.b.2 2.b.3 2.b.4	2.c.2	2.a.2		Hepatic system

2.d.5	2.b.2 2.b.7	2.c.2	2.a.1 2.a.3 2.a.13 2.a.15	CNS system
2.d.1 2.d.2 2.d.3 2.d.4		2.c.3	2.a.14	Heavy metals

**Course coordinator:** 

**Head of Department: Prof.** 

Date: September 2020





**Benha University** 

**Faculty of Medicine** 

**Department of Forensic Medicine and Clinical Toxicology** 

#### **Course Specifications**

Course title: Medical Statistics
Code: FORE & TOXI 607

**Academic Year (2020–2021)** 

- Department offering the course: Community Medicine department.
- Major or minor elements of the program: Minor.
- Academic level: First part the program
- Date of specification approval: department council No. (325
  - Department council: date: 6 / 9 /2020.
  - Faculty council date: 71/9/2020. Revised & approved By Prof. Raneyah Hamdy.

# A) **Basic Information**:

- Allocated marks: <u>50 marks</u>.
- Course duration: <u>15</u> weeks of teaching.
- Credit hours: <u>1</u> hour
- **Teaching hours:** <u>1</u> hour / week.

Method of teaching	Teaching Hours / week	<b>Total hours</b>
Lectures/ Seminars/ Case based learning/ Directed self-learning	1/ week	15
2- Practical / Clinical		
Total	1/week	15

# **B) Professional Information:**

1- Overall Aim of the Course

- 1.1 To equip candidates with Principles of Biostatistics, types of data, methods of presentation of data, types of Epidemiological studies, Sampling, statistical methods& research methods.
- 1.2 To provide the candidates with the knowledge and skills necessary to practice statistical analytical methods and research methods.
- **1.3** To enable the candidates to evaluate the health problems.

# 2- <u>Intended Learning Outcomes (ILOs)</u>:

#### 2.a. Knowledge and understanding:

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

- **2.a.23.** Memorize forensic and clinical toxicology programs based on local needs.
- **2.a.24.** Describe the basics of Principles of Biostatistics, types of data, methods of presentation of data, types of Epidemiological studies, Sampling, statistical methods and research methods.

#### 2.b. Intellectual Skills:

#### By the end of the course, students should be able to:

- 2.b.1 Choose suitable methods for conducting research.
- 2.b.2 Choose suitable methods for the analysis of data.
- 2.b.3 Select appropriate methods for evaluating the health problem.

#### 2.c. General and Transferable Skills:

#### By the end of the course, students should be able to:

2.c.1 Communicate clearly, sensitively, and effectively with patients and their relatives,

And colleagues from a variety of health and social care professions.

- 2.c.2 Conduct proper counseling practices to provide appropriate basic research methods.
- 2.c.3 Respect the role of others, superiors, colleagues and all members of the

health profession.

- 2.c.4 Conduct different types of surveys.
- 2.c.5 Apply the principles of statistical methods for collection, presentation & analysis of all types of data.

#### 3- Course contents: :

Subject	Lectures (hrs)	% of Total
1-Types of data	1	<b>7%</b>
2-Collection of data:		
<ul><li>Sampling</li><li>Screening</li><li>Epidemiological studies</li></ul>	3	20%
3-Summarization of data:  Measures of central tendency  Measures of dispersion	2	14%
4-Presentation of data:  Tabular presentation  Graphic presentation  Mathematical presentation	2	13%
5-Normal distribution curve	1	6%
6-Hypothesis testing	1	6%
7-Analysis of data & tests of significance	2	14%
8-Vital rates	2	14%
9-Ethics of research	1	6%
TOTAL	15	100%

# 4- <u>Teaching and learning methods</u>:

#### **METHODS USED:**

- 6. Modified lectures.
- 7. Seminars.
- 8. Directed self-learning.
- 9. Case based learning
- 10.Practical/clinical classes.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brainstorming, problem solving, etc)	2.a.12.a.2., 2.b.1 2.b.3 2.c.12.c.5
Case based learning	Case scenarios	2.a.12.a.2., 2.b.1 2.b.3 2.c.12.c.5
Directed self-learning.	Log book	2.a.12.a.2., 2.b.1 2.b.3 2.c.12.c.5
Seminars	Log book	2.a.12.a.2., 2.b.1 2.b.3 2.c.12.c.5

# 5- <u>Students Assessment methods</u>:

# 5-A) ATTENDANCE CRITERIA:

- 4. Lectures/seminars (at least 50% attendance).
- 5. Practical & clinical (at least 75% attendance).
- 6. Log book (practical reports & students activity).

# 5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination:	Attached module of examination To assess knowledge acquisition, including problem solving	2.a.12.a.2., 2.b.1 2.b.3 2.c.12.c.5

Oral examination	Viva card system	2.a.12.a.2.,
	To assess	2.b.1 2.b.3
	understanding and	2.c.12.c.5
	stability of	
	knowledge given,	
	attitude and	
	presentation.	

#### 5-C) TIME SCHEDULE:

Exam	Week		
1- Formative Assessments	At 5 <sup>th</sup> / 7 <sup>th</sup> weeks		
2- <i>Final exam</i> Written exam Oral exam	After 15 weeks of registration of the degree. After the written exam.		

### **FORMATIVE ASSESSMENT:**

• Student knows his marks after the Formative exams.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
Written	30	60%
Oral	20	40%
Total	50	100%

# **5-E)** Examination description :

Examination	Description				
Written	<ul> <li>A two-hour written paper composed of short essay-type</li> </ul>				
	questions and Case study.				
Oral	• One oral examination station with 2 staff members (10-15 minutes: 4-5 questions).				

# 6- <u>List of references</u>:

- 6.1- Basic materials:
  - Handouts of the staff member in the department
- 6.2- Essential books (textbooks):
  - Khalil IF, 1999: Biostatistics, Cairo University
- 6.3- Recommended books:
  - Maxcy RL, 2008: Public health and preventive medicine.
- 6.4- Periodicals, Web sites, etc:

- WHO.int.com
- Pub. Med
- Google
- Science direct

#### 7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- 7.1 Adequate infrastructure: including teaching places (teaching class &teaching hall) provided with comfortable desks, fans, air condition, adequate sources of lighting both natural and artificial and security tools.
- 7.2 Teaching tools: including screens, black board, white board, data show, computers, laser printer, scanner & copier.
- 7.3 Computer program: for statistical analysis of data.

Course coordinator: Prof Dr. Abd Elmoniem A. Younis Dawah

Head of Department: Prof D rRaneyah Hamdy

Date: 6-9 2020

Medical Statistics \* "

مصفوفة المعارف والمهارات المستهدفة من المقرر الدراسي جامعة/: بنها كلية / الطب البشرى قسم الطب الشرعى و السموم

Med	iicai Statistics	سمى المقرر	4		
FO	RE & TOXI 607	كود المقرر			
	مهارات عامة	مهارات ذهنية	المعارف الرئيسة	أسبوع الدراسة	المحتويات للمقرر
	2.c.2		2.a.2	1th	1-Types of data

2.c.1 2.c.2 2.c.4 2.c.5	2.b.1	2.a.2	2,3,4 <sup>th</sup>	<ul> <li>2-Collection of data:</li> <li>Sampling</li> <li>Screening</li> <li>Epidemiological studies</li> </ul>
2.c.2	2.b.2	2.a.2	5,6 <sup>th</sup>	3-Summarization of data:  • Measures of central tendency  Measures of dispersion
2.c.3 2.c.4		2.a.2	7,8 <sup>th</sup>	4-Presentation of data:  Tabular presentation  Graphic presentation  Mathematical presentation
2.c.3 2.c.4		2.a.2	9 <sup>th</sup>	5-Normal distribution curve
2.c.1 2.c.5		2.a.2	10 <sup>th</sup>	6-Hypothesis testing
2.c.3	2.b.2	2.a.2	11,12 <sup>th</sup>	7-Analysis of data & tests of significance
2.c.2	2.b.3	2.a.1 2.a.2	13 <sup>th</sup>	8-Vital rates
2.c.5	2.b.2 2.b.3	2.a.2	14 <sup>th</sup>	9-Ethics of research

Course coordinator: Prof Dr. Abd Elmoniem A. Younis Dawah

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

Date: 6 September 2020





**Benha University** 

**Faculty of Medicine** 

**Department of Forensic Medicine and Clinical Toxicology** 

#### **Course Specifications**

الطب الشرعي: Course title

Code: FORE& TOXI 608

**Academic Year (2020–2021)** 

- Department offering the course: ... Forensic medicine & clinical toxicology
- Major or minor elements of the program: Major
- Academic level: second part of the program
- Date of specification approval:
  - Department council: date: \(\lambda/9/2020.\)
  - Faculty council date: 11/9/2020.

# A) Basic Information:

- Allocated marks: <u>...750.....</u> marks.
- Course duration: 45..... weeks of teaching.
- **Credit hours:** \_\_\_\_\_hours
- Teaching hours: \_\_\_\_\_hours / week.

Method of teaching	Teaching Hours / week	<b>Total hours</b>
1- Lectures/ Seminars/ Case based learning/ Directed self-learning	10/ week	30
2- Practical / Clinical	10/week	30
Total		60

# **B)** Professional Information:

# 1- Overall Aim of the Course:

o To provide scientific knowledge of all aspects of forensic medicine

- To provide practical and clinical skills necessary for proper dealing with different situations related to forensic medicine and taking proper decision
- o To provide the students with professional education and communication skills essential for establishing & maintaining good doctor/ patient relationship, appropriate attitudes with colleagues and para-medicals.
  - Ò Enable the student to deal with mass disasters & How to identify any un known body.

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

#### 2.a. Knowledge and understanding:

- 2.a.25. Classify different methods of identification
- 2.a.26. Write medico-legal information from hair, scar, and tattoo mark(s)
- 2.a.27. Identify age, sex & race from skull and long bone
- 2.a.28. Define death & Differentiate between somatic and molecular death
- **2.a.29. Explain** How to estimate 'time since death' from the immediate, early and late changes after death.
- **2.a.30. Differentiate** between postmortem staining and bruising, hypostasis and congestion, rigor mortis and cadaveric spasm, rigor mortis and conditions simulating rigor mortis, etc.
- 2.a.31. Discuss mechanism of death by compression of the neck
- 2.a.32. Classify Types, cause of death, autopsy findings and circumstances of strangulation, Mugging, garroting, manual strangulation, etc.
- **2.a.33. Define** Infanticide and the related law
- 2.a.34. Classify Different classification of burns, Rule of nine,Causes of death in burn

- **2.a.35.** *Identify* scalds and their medicolegal aspects.
- **2.a.36. Discuss** Mechanism of death from electrocution.
- **2.a.37. Explain** mechanism of death from abortion
- **2.a.38. Differentiate between** Characters of wounds produced by rifled and smooth-bore firearms.
- **2.a.39.** Write autopsy findings in firearm injuries.
- 2.a.40. Illustrate medicolegal aspects of coup and contrecoup injuries
- 2.a.41. Differentiate between Concussion and compression
- 2.a.42. Demonestrate heart injuries caused by blunt trauma
- **2.a.43. Discuss** Pattern of injuries to the pedestrians, motor cyclists and pedal cyclists.
- 2.a.44. Write Medico-Legal Aspects of Permanent infirmity
- 2.a.45. List evidences of virginity & types of hymens
- **2.a.46.** *Identify* physical evidences in rape
- **2.a.47.** List causes of impotence and sterility in males
- 2.a.48. Explain mechanism of death from Shaken Baby Syndrome.
- 2.a.49. List types of abortion

#### 2.b. Practical Skills

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

- 2.b.1. Write an autopsy report.
- 2.b.2. Write a wound report.
- 2.b.3. identify jars for forensic specimen
- 2.b.4. Perform examination of cadevers
- 2.b.5. . Write an x ray report
- **2.b.6** Child Abuse: Examination of victim & accused in acase of rape
- **2.b.7.** *identify* firearm specimens

#### 2.c. Intellectual Skills:

- 2.c.1. *Analyze* different case scenarios of clinical forensic medicine, and forensic pathology as well as the different crime scene evidences investigations, to reach to the cause, mechanism, mode and manner of death.
- 2.c.2. *classify* different types of suffocation deathes
- 2.c.3. *Correlate* between different forensic conditions and its related physiological, pharmacological and biochemical basis.
- 2.c.4. Assess risks during practicing forensic medicine.
- 2.c.5. **Design** solutions for medical problems met during practicing forensic medicine even with absence of some administrative tools.

#### 2.d. General and transferable Skills:

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

- **2.d.1.** Establish life-long self-learning required for continuous professional development.
- **2.d.2.** *Use* the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- **2.d.3. Retrieve**, manage, and manipulate information by all means, including electronic means.
- 2.d.4. Present information clearly in written, electronic and oral forms.
- 2.d.5. Establish effective interpersonal relationship to communicate ideas and arguments.

#### 3- Course contents:

Subject	Lectures (hrs)	%	Practical (hrs)	%	Total (hrs)	% of Total
1- Identification::	2	10	3	10	5	5 %

2- II. Deaths	1	5	1	5	2	5 %
3 Asphyxial Deaths:	3	15	2	10	5	10 %
4- Infanticide:	2	5	1	10	3	5
5- Thermal Deaths::	1	5	1	5	2	5 %
6 Death by Electrocution::	1	5	1	5	2	5 %
7- Deaths associated with Pregnancy, delivery and Abortion.	2	5	1	5	3	5
8- Injuries	3	5	3	10	6	5
9- Firearm injuries and Injuries by explosions:	3	12	4	10	7	10
10- Regional Injuries:	2	10	4	10	6	20
11- Chest and abdominal injuries	1	2	1	5	2	4
12- Transportation Injuries:	2	2			2	2
13- Medico-Legal Aspects of Permanent infirmity	1	2			1	2
14- Virginity, Pregnancy and Delivery	2	5	5	5	7	5
15- Abortion.	2	5	2	5	4	5
16- Sexual assault	1	2			1	2
17 Child Abuse:	1	5	1	5	2	5
TOTAL	30	100	30	100	60	100%

# 4- Teaching and learning methods: <u>METHODS USED:</u>

- 11. Modified lectures.
- 12.**Seminars.**
- 13. Directed self-learning.
- 14. Case based learning
- 15. Practical/clinical classes.

Method	Evidence	ILOs
1VICTIOU	Litachee	1205

Modified lectures	CDs of lectures including (video films, brainstorming, problem solving, etc)	2.a.12.a.25., 2.c.12.c.5 2.d.12.d.5
Case based learning	Case scenarios	2.a.12.a.25., 2.c.12.c.6 2.d.12.d.5
Directed self-learning.	Log book	2.a.12.a.25., 2.c.12.c.6 2.d.12.d.5
Seminars	Log book	2.a.12.a.25., 2.c.12.c.6 2.d.12.d.5
Practical classes	Wound reports, X-ray reports &log book.	2.b.12.b.7

# 5- Students Assessment methods:

# 5-A) ATTENDANCE CRITERIA:

- 7. Lectures/seminars (at least 50% attendance).
- 8. Practical & clinical (at least 75% attendance).
- 9. Log book (practical reports & students activity).

# **5-B)** Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination:      MCQs     Case study     Short essay     True or false with explanation	Attached module of examination	2.a.12.a.25., 2.c.12.c.6 2.d.12.d.5
Oral examination	Viva card system	2.a.12.a.25., 2.c.12.c.6 2.d.12.d.5
Practical & clinical examination [OSPE/OSCE]	Practical, clinical & Reports	2.b.12.b.5

#### 5-C) TIME SCHEDULE:

Exam	Week	
1- Formative Assessments	By the end of the 1 <sup>st</sup> 22 weeks& another one after the 2 <sup>nd</sup> 22w	
2- Final exam	At the end of 45w	

#### **FORMATIVE ASSESSMENT:**

• Student knows his marks after the Formative exams.

#### 5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
c- Written	300	
d- Practical & Field	250	
training	200	
c- Oral		
Total	750	

### 5-E) Examination description:

Examination	Description
End semester:	
d- Written	Short assay, select (MCQs), & case study, true or
e- Practical	false with explanations.
f- Oral	Write reports and comments on specimens
1- Olai	Viva cards divided into in two sessions
c- Oral	Two sessions (forensic and toxicology)
3- Assignments & other activities	Round assignments, projects, log book etc.

# 6- <u>List of references</u>:

#### 6.1- Basic materials:

• Department books by staff members

#### 6.2- Essential books (textbooks):

- Goldfrank's Manual of Toxicologic Emergencies: Hoffman, R.S.; Nelson, L.S.; Howland, M.A. et al. (eds.), McGraw-Hill Companies, New York, 9<sup>th</sup> ed., (2019).
- Poisoning & Drug Overdose. By: *Olson, K.R.* (ed.), Lange medical books/McGraw-Hill, New York, Chicago, Toronto, (2020).

#### 6.3- Recommended books:

- Goldfrank's Toxicologic Emergencies. By: Flomenbaum, N.E.; Goldfrank, L.R.; Hoffman, R.S., et al. (eds.), McGraw-Hill, New York, 8<sup>th</sup> ed., (2015).
- Clinical Toxicology. By: *Ford, M.D.; Delaney, K.A.; Ling, L.J. et al.* (eds.), W.B. Saunders Co., Philadelphia, 1<sup>st</sup> ed., (2015).

#### 6.4- Periodicals, Web sites, etc:

- http://www.pubmed.com.
- http://sciencedirect.com.

#### 7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lecture hall
- Department lectures halls: two
- Museum hall: SIXTH

floor

- Department lab.

دراسي	من المقرر ال	المستهدفة	المعارف والمهارات	مصفوفة	
قسمالطب	البشري	ة /الطب	كلياً	الها	جامعة/:
			ىيە	والسموم الاكلينيك	الشرعي و

الطب الشرعي	مسمى المقرر
FORE& TOXI	كود المقرر
608	33 3

مهارات عامة	مهارات مهنية	مهارات ذهنية	المعارف الرئيسة	أسبوع الدراسة	المحتوبات للمقرر
2.d.1.	2.b.3.	2.c.1.	2.a.1 2.a.2. 2.a.3.		1- Identification:

2.d.2.	2.b.1. 2.b.4.		2.a.4 2.a.5.	2 Deaths
			2.a.6.	
2.d.3.	2.b.3.	2.c.2.	2.a.7 2.a.8.	3 Asphyxial Deaths:
	2.b.3.		2.a.9.	4- Infanticide:
	2.b.3.		2.a.10 2.a.11.	5- Thermal Deaths::
	2.b.3.		2.a.12	6 Death by Electrocution::
2.d.5.	2.b.3.		2.a.13.	7- Deaths associated with Pregnancy, delivery and Abortion.
	2.b.2.	The state of the s	2.a.14	8- Injuries
		The state of the s		9- Firearm
2.d.4.	2.b.3. 2.b.7.		2.a.15	injuries and Injuries by
				explosions:
	2.b.3.		2.a.16. 2.a.17.	10- Regional Injuries:
	2.b.3.		2.a.18.	11- Chest and abdominal injuries
			2.a.19.	12- Transportation Injuries:
			2.a.20.	13- Medico- Legal Aspects of Permanent infirmity
			2.a.21.	14- Virginity, Pregnancy and Delivery
			2.a.21.	15- Abortion.
	2.b.6.		2.a.25.	16- Sexual assault
			2.a.24.	17 Child Abuse:

**Course coordinator: Head of Department: Prof. Dr shereen el kholy** September Date: 2020 114



Benha University
Faculty of Medicine
Department of Forensic Medicine and Clinical Toxicology

**Course Specifications** 

Course title: Clinical toxicology
Code: FORE & TOXI 609

Academic Year (2020-2021)

- Department offering the course: Forensic Medicine & Clinical Toxicology Department
- Major or minor elements of the program: Major
- Academic level: second part of Master
- Date of specification approval:
  - Department council: date: ^/9/2020.
    Faculty council date: ^//9/2020.

#### A) Basic Information:

- Allocated marks: 750 marks.
- Course duration: 45 weeks of teaching.
- Credit hours: <u>15 hours</u>
- Teaching hours: <u>20 hours</u> / week.

Method of teaching		Teaching Hours / week	Total hours
1- Lectures/ Seminars/ Case based		12/ week	540
learning/ Directed self-learning			
	2- Practical / Clinical	8/ week	360
	Total	20/ week	900

# B) Professional Information:

#### 1- Overall Aim of the Course:

o To provide the students with scientific knowledge that enables them to deal with common medico-legal conditions (either in living or dead cases).



- To provide the students with scientific knowledge that enables them to deal with common toxic cases, either acute or chronic poisoning and drug dependence.
- o To provide practical and clinical skills necessary for proper dealing with the common toxic cases, that will face him during practicing medicine.
- To provide the students with ethical, professional education and communication skills essential for establishing & maintaining good doctor/ patient relationship, appropriate attitudes with colleagues and para-medicals.

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

#### 2.a. Knowledge and understanding:

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

- **2.a.1.** *Illustrate* mechanism, clinical picture and management of common therapeutic drugs.
- **2.a.2.** *Discuss* mechanism, clinical picture and management of the studied household poisons especially (corrosives, food poisoning, pesticides, hydrocarbons and other miscellaneous poisons).
- **2.a.3.** *Enumerate* the circumstances of intoxication, management of poisoned patient with environmental toxins (heavy metals, gas poisons, smoke inhalation, etc...).
- **2.a.4.** *Discuss* mechanism, clinical picture and management of the studied household poisons especially (corrosives, food poisoning, pesticides, hydrocarbons, toxic alcohols and other miscellaneous poisons).
- **2.a.5.** *List* clinical picture and management of animal toxins (snakes, scorpions, etc....).
  - **2.a.6.** *Discuss* types of drugs of dependence, mechanism of tolerance, mechanism of actions, clinical picture and management of studied cases of dependence (opioids, cocaine, alcohols, hallucinogens ...).

#### 2.b. Practical Skills

- **2.b.1.** Write a primary toxicological report.
- **2.b.2.** identify toxicological specimens (plant specimens, etc....)
- 2.b.3. Diagnose some common studied intoxicated cases (therapeutics & household intoxicated cases).



#### 2.c. Intellectual Skills:

#### By the end of the course, students should be able to:

- **2.c.1.** *Interpret* case scenario of clinical toxicology cases to put a proper plan for their management.
- **2.c.2. Differentiate** between similar cases of intoxication to formulate precise and accurate differential diagnosis of intoxicated cases.
- **2.c.3 Interpret** common investigative and diagnostic tools including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.
- **2.c.4 Combine** all obtained results either from history taking, medical examination and investigations in order to diagnose the medical problems.

#### 2.d. General and transferable Skills:

- 2.d.1. Establish life-long self-learning required for continuous professional development.
- **2.d.2. Use** the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- 2.d.3. Present information clearly in written, electronic and oral forms.
- **2.d.4 Establish** effective interpersonal relationship to communicate ideas and arguments.



#### 3- Course content:

Subject	Led e (hrs)	S	% Prac (hr		% Tot (hrs	
1- Analgesics and Anti-inflammatory Medications:	30	5.5	24	6.6	54	6 %
2- Foods, Dietary and Nutritional Agents:	45	8.3	24	6.6	69	7.6 %
3- Pharmaceuticals:	50	9.3	48	13.2	74	8.2 % 4-
Cardiopulmonary Medications:	45	8.3	24	6.6	69	<b>7.6 %</b> 5-
Psychotropic Medications:	45	8.3	24	6.6	54	6 %
6- Substances of Abuse:	60	11.1	48	13.2	108	12% 7-
Heavy metals	60	11.1	24	6.6	74	8.2% <mark>8</mark> -
Household products	50	9.3	48	13.2	69	<b>7.6 %</b> 9-
Pesticides	50	9.3	24	6.6	74	8.2 10-
Occupational and Environmental Toxins:	45	8.3	<b>48</b>	13.2	<b>93</b> 1	10.3%
TOTAL	540	100	360	100	900	100%

# 4- Teaching and learning methods:

# **METHODS USED:**

- 1. Modified lectures.
- 2. Seminars.
- 3. Directed self-learning.
- 4. Case based learning
- 5. Practical/clinical classes.

Method	Evidence	ILOs



Modified CDs of lectures including (video films, brainstorming, problem solving, etc)		2.a.12.a.6., 2.c.12.c.4 2.d.12.d.4
Case based learning	Case scenarios	2.a.12.a.6., 2.c.12.c.4 2.d.12.d.4
Directed self-learning.	Log book	2.a.12.a.6., 2.c.12.c.4 2.d.12.d.4
Seminars	Log book	2.a.12.a.6., 2.c.12.c.4 2.d.12.d.4
Practical classes	Toxicological reports, log book.	2.b.12.b.3

# 5- Students Assessment methods:

# A) **ATTENDANCE CRITERIA**:

- 1. Lectures/seminars (at least 50% attendance).
- 2. Practical & clinical (at least 75% attendance).
- 3. Log book (practical reports & students' activity).



# B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination:	Attached module of	
	examination	2.a.12.a.6.,
•• MCaCQse ss tudy		2.c.12.c.4
<ul><li>Short essay</li><li>True or false with explanation</li></ul>		2.d.12.d.4
Oral examination	Viva card system	2.a.12.a.6., 2.c.12.c.4 2.d.12.d.4
Practical & clinical	Practical, clinical &	2.b.12.b.3
examination	Reports	2.0.12.0.3
[OSPE/OSCE]		

# C) **TIME SCHEDULE**:

Exam	Week <mark>1-</mark>
Formative Assessments	15th week/ 35th week 2-
Final exam	46th week

#### > FORMATIVE ASSESSMENT:

• Student knows his marks after the Formative exams.

D) Weighting System:		
<b>Examination</b>	Marks allocated	% of Total Marks
a- Written	300	40
b- Practical & Field training	250	33
c- Oral		



200	27

Total 750 100

#### E) Examination description:

Examination	Description
End semester:	
a- Written	Short assay, select (MCQs), & case study, true or false with explanations.
b- Practical	
	Write reports and comments on specimens
	Viva cards divided into in two sessions
c- Oral	Two sessions (forensic and toxicology)
3- Assignments & other activities	Round assignments, projects, log book etc.

#### 6- List of references:

#### 6.1- Basic materials:

Department books by staff members

#### 6.2- Essential books (textbooks):

- 1. Goldfrank's Toxicologic Emergencies (2018): 11th edition, McGraw-Hill, New York, Flomenbaum, N.E.; Goldfrank, L.R.; Hoffman, R.S., et al. (eds.).
- 2. Dart's Medical Toxicology (2003): 3rd Edition. Lippincott Williams and Wilkins, Richard C. Dart, M.D. et al., Eds.
- 3. Poisoning & Drug Overdose (2021): Olson, K.R. (ed.) Lange medical books/McGraw-Hill, New York, Chicago, Toronto, 7th ed.

#### **6.3- Recommended books:**

• Goldfrank's Toxicologic Emergencies. By: Flomenbaum, N.E.; Goldfrank, L.R.; Hoffman, R.S., et al. (eds.), McGraw-Hill, New York, 11th ed., (2018).

#### 6.4- Periodicals, Web sites, etc:

- http://www.pubmed.com.
- <a href="http://sciencedirect.com">http://sciencedirect.com</a>.



# 7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lecture hall

- Department lectures halls: two

- Museum hall: SIXTH floor

- Department lab.

# مصفوفة المعارف والمهارات المستهدفة من المقرر الدراسي

جامعة/: بنها كلية / الطب البشرى قسم: الطب الشرع ى والسموم االكلينيكية

السموم االكلينيكية	مسمى المقرر
FORE & TOXI 609	كود المقرر
m ( ) a	أسره الدراس ة

المحتويات للمقرر	أسبوع الدراس ة	المعارف	مها رات	مهارات	مهارات
		الرئيس ة	<b>ذهنية</b>	مهني ة	عامة
Analgesics and Anti- inflammatory Medications:	$1_{st}  /  2_{nd}  /  3_{rd}$	2.a.1	2.c.1- 2.c.4	2.b.1	2.d.1- 2.d.4
Foods, Dietary and Nutritional Agents:	$4 \mathrm{th}/\ 5 \mathrm{th}/\ 6 \mathrm{th}/\ 7 \mathrm{th}$	2.a.2	2.c.1- 2.c.4	2.b.1	2.d.1- 2.d.4
Pharmaceuticals:	8thl 9th/ 10th /	2.a.1	2.c.1- 2.c.4	2.b.1/ 2.b.3/	2.d.1- 2.d.4
Cardiopulmonary Medications:	16th / 17th / 18th / 19th	2.a.1	2.c.1- 2.c.4	2.b.1	2.d.1- 2.d.4
Psychotropic Medications:	20th 1 21th/ 22th/ 23th / 24th	2.a.1	2.c.1- 2.c.4	2.b.1	2.d.1- 2.d.4
Substances of Abuse:	25th/ 26th/ 27/ 28th/ 29th/ 30th	2.a.6	2.c.1- 2.c.4	2.b.1	2.d.1- 2.d.4
Heavy metals	31/32/33th	2.a.3	2.c.1- 2.c.4	2.b.1	2.d.1- 2.d.4
Household products	34/35/36th	2.a.4	2.c.1- 2.c.4	2.b.1/ 2.b.3	2.d.1- 2.d.4
- Pesticides	37/38/39th	2.a.4	2.c.1- 2.c.4	2.b.1/ 2.b.3/	2.d.1- 2.d.4
Occupational and Environmental Toxins:	43/44/45th	2.a.5	2.c.1- 2.c.4	2.b.1	2.d.1- 2.d.4

**Course coordinator: Prof. Abdelmonaim Goda** 



#### Dr. Yasmina badr

**Head of Department:** Prof. Sherin El- kholy

Date: September 2022