جامعة بنها
كلية الطب البشرى
قسم الطب الشرعى و السموم الأكلينيكية

توصيف برنامج ماجستير الطب الشرعى و السموم الأكلينيكية
(عام 2013-2014)

* معلومات أساسية : Basic information

١ ـ اسم البرنامج : **Master of Forensic medicine &Clinical toxicology**

٢ ـ طبيعة البرنامج : Multiple

٣- القسم المانح للدرجة: **الطب الشرعى و السموم الأكلينيكية**

- الأقسام المشتركة فى البرنامج: **الفارماكولوجى، الباثولوجى، الباطنة العامة.**

٤- تاريخ إقرار البرنامج فى مجلس القسم : ٥ / ٩ / ٢٠١٣

٥- تاريخ إقرار البرنامج فى مجلس الكلية: ١٦ / ٩ / ٢٠١٣

٦- منسق البرنامج: **Prof. Dr. Ola Gaber Haggag**

٧- المراجة الداخلية للبرنامج: **Prof. Dr. Mohammed Kamel**

٨- المراجع الخارجى: **Prof. Dina Shokry; Professor of Forensic Med. & Clin. Toxicology, Cairo University**

* معلومات متخصصة: Professional information

١ ـ الأهداف العامة للبرنامج :

1- Overall Aims of the Program:

The overall aims of the program are to:

1.1. ***Apply*** the essential knowledge and skills in forensic medicine, clinical toxicology and their related basic medical sciences during professional practice.

1.2. ***Identify*** 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. ***Provide*** the postgraduate with lifelong learning competencies necessary for continuous professional development.

1.4. **Show** awareness of principles of medical research in the field of forensic medicine and clinical toxicology.

1.5. ***Demonstrate*** interpersonal and communication skills that ensure effective information exchange with patients and their families colleagues, medical students and other health professions.

1.6. ***Acquire*** decision making capabilities in different situations related to forensic medicine and clinical toxicology.

1.7. ***Be aware*** of public health problems and health policy issues and share in system-based improvement of health care.

1.8. ***Show*** appropriate attitudes and professionalism.

1.9. ***Function*** as a member or a leader of a team for dealing with health problems and aid in health promotion.

٢ ـ 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. Understand the medicolegal aspects of different disciplines of clinical forensic medicine and forensic pathology.

2.a.2. Recognize the basics and principles of different branches of toxicology especially clinical, occupational, pediatric and forensic toxicology.

2.a.3. Know the different investigational methods used in the field of forensic chemistry and analytical toxicology.

2.a.4. Discuss the basic medical physiological, biochemical and pharmacological basics related to the studied topics in forensic medicine and clinical toxicology.

2.a.5. Understand 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. Identify 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. Acquire 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: **٢.ج . مهارات مهنية وعملية :-**

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.

٢.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 Standards of Master Program of forensic medicine and clinical toxicology,** approved in department council no (247) date 5 / 6 / 2013, and in faculty council no. (354) date 6/ 2013. **(ملحق ١)**

4- Reference standards — 4- العلامات المرجعية:

a) المعايير القياسية العامة لبرامج الدراسات العليا (درجة الماجستير) (مارس ٢٠٠٩)

Academic reference standards (ARS), Master Program (March 2009)

, which were issued by the National Authority for Quality Assurance & Accreditation of Education NAQAAE **(ملحق ٢)**

b) External references standards (Benchmarks): المعاييرالمرجعية الخارجية

External reference points/benchmarks are selected to confirm the appropriateness of the objectives, ILOs of the program, **(ملحق ٣) .**

1. Forensic medicine and toxicology program, Department of Forensic Medicine, University of **Dundee**, 2006. Dundee, Scotland. Tel: Int. code: +44 (1382) 388020; UK code (01382) 388020 www.dundee.ac.uk
2. Forensic medicine and forensic sciences program, Department of Forensic Medicine, Faculty of Medicine, Nursing and Health Sciences, **Monash** University. http://www.med.monash.edu.au/vifm/

(5): Program structure and contents — 5 - هيكل ومكونات البرنامج:

أ - مدة البرنامج : عامين

- **1st part: -** One Semester.
- **2nd part: -** Two Semester.
- **Thesis: -** One Semester.

ب - هيكل البرنامج :

- **Total hours of program** = 36 credit hours
- **Theoretical** ========== 18 credit hours
- **Practical & clinical** ==== 8 credit hours
- **Compulsory** -----إلزامي all courses
- **Selective** انتقائي ---- none
- **Elective**---اختياري --- none
- **University and faculty requirements:** 6 credit hours
- **Thesis** ==========: **4** credit hours

ج- مستويات ومقررات البرنامج:

الزامي compulsory

البند	المقررات	الكود	الساعات المعتمدة
متطلبات	للجامعة والكلية	UNIV 601	٦ ساعات
الجزء الأول	يشمل الآتي:		٧ ساعات
	السموم المهنيه والكيمياء الشرعية	FORE 601 (a,b)	٢ ساعة
	علم الأقربازين والكيمياء الحيوية ووظائف الأعضاء	FORE 602 (a,b,c)	٣ ساعة
	الباثولوجيا الإكلنيكية	FORE 603	١ ساعة
	طب الأطفال	FORE 604	١ ساعة
كراسة الأنشطة	تسجل بها الأنشطة المختلفة مثل حضور الندوات العلمية والمؤتمرات والدورات التدريبية وإجراء أبحاث إضافية		٤ ساعات
الجزء الثاني	يشمل الآتي:		١٥ ساعة
	الطب الشرعي (مقرر علمي وعملي وإكلينيكي)	FORE 605	٨ ساعات
	السموم والأمراض الباطنة (مقرر علمي وعملي وإكلينيكي)	FORE 606 (a,b)	٧ ساعات (٥-٢)
رسالة ماجستير			٤ ساعات
الإجمالي			**٣٦ ساعة**

First part (one semester):

a- Compulsory courses:

Course Title	Course Code	NO. of Teaching hours per week			Total teaching hours/ One Semester
		Theoretical	practical	Total/W	
1- **Occupational toxicology**	**FORE 601 a**	1		1	15 hours
2- **Forensic Chemistry & Analytical toxicology**	**FORE 601 b**	1		1	15 hours
1- **Pharmacology**	**FORE 602 a**	1		1	15 hours
4- **Biochemistry**	**FORE 602 b**	1		1	15 hours

5- Physiology	FORE 602 c	1	1	15 hours
6- Clinical pathology	FORE 603	1	1	15 hours
7- Pediatric medicine	FORE 604	1	1	15 hours
Total:		**7**	**7**	**105 hours**

b-Elective courses: ..... none

b- Selective: ..... none

Second part (2 semesters):

a-Compulsory courses:

Course Title	Course Code	NO. of Teaching hours per week			Total teaching hours / **2 semesters**
		Theoretical	practical	Total/ Week	
1- Forensic medicine	FORE 605	6	6	12	١٨٠ hours
2- Clinical toxicology	FORE 606a	4	3	7	١٠٥ hours
3- General medicine	FORE 606b	1	3	4	٦٠ hours
Total:		**11**	**12**	**23**	**٣٤٥ hours**

b-Elective courses: ..... none

c- Selective: ..... none

6- محتويات المقرات (راجع توصيف المقررات):

مرفق توصيف المقررات طبقا" للنموذج

7 ـ متطلبات الإلتحاق بالبرنامج : (7): Program admission requirements

مادة (٤): **يشترط فى قيد الطالب لدرجة الماجستير: (١)

أ- أن يكون حاصلا على درجة البكالوريوس فى الطب والجراحة من احدى جامعات ج.م.ع أو على درجة معادلة لها من معهد علمى معترف به من الجامعة بتقدير جيد على الأقل.

ب- يسمح للحاصل على الدبلوم 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 وبغض النظر على تقديره فى درجة البكالوريوس.

ت- يسمح للحاصل على الدبلوم وعلى خلاف لنظام هذه اللائحة أن يسجل لدرجة الماجستير بشرط أن يكون تقديره فى الدبلوم لا يقل عن جيد وبغض النظر عن تقديره فى البكالوريوس.

(٢) أن يكون قد أمضى السنة التدريبية أو ما يعادلها (سنة الامتياز)

(٣) أن يتفرغ للدراسة لمدة سنة على الأقل فى الجزء الثانى (فصلين دراسيين)

مادة (٥): يكون التقدم للقيد لدرجة الماجستير مرة واحدة فى السنة خلال شهري يوليو وأغسطس من كل عام. ,تبدأ الدراسة لدرجة الماجستير فى شهر أكتوبر من كل عام.

8 ـ القواعد المنظمة لإستكمال البرنامج : (طبقاً لما هو مذكور فى اللائحة)

مادة (٦): تتولى لجنة الدراسات العليا بالكلية عن طريق لجنة تشكل لكل تخصص من أعضاء مجلس القسم التابع له المادة والقسم المانح للدرجة وضع البرنامج التفصيلى للمقررات فى حدود الساعات المعتمدة الواردة باللائحة وعند الاختلاف يتم الاسترشاد بمقررات جامعة القاهرة ومقررات الشهادات العالمية الاوربية والامريكية يعتمدها مجالس الأقسام ثم يقرها مجلس الكلية وتشمل هذه الساعات محاضرات نظرية ودروس عملية وتدريب اكلينيكى ومحاضرات وندوات مشتركة.

مادة (٧): يشترط فى الطالب لنيل درجة ماجستير التخصص فى أحد الفروع الاكلينيكية والعلوم الطبية الأساسية:

أ- حضور المقررات الدراسية والتدريبات الاكلينيكية والعملية والمعملية بصفة مرضية طبقا للساعات المعتمدة.

ب- أن يقوم بالعمل كطبيب مقيم أصلى أو زائر لمدة سنة على الأقل فى قسم التخصص بالنسبة للعلوم الاكلينيكية.

ت- أن ينجح فى امتحان القسمين الأول والثانى.

ث- اجتياز الطلب لثلاث دورات فى الحاسب الآلى (دورة فى مقدمة الحاسب – دورة تدريبية متوسطة – دورة فى تطبيقات الحاسب الآلى) وذلك قبل مناقشة الرسالة.

ج- اجتياز اختبار التويفل بمستوى لايقل عن ٤٠٠ وحدة وذلك قبل مناقشة الرسالة.

أن يقوم باعداد بحث فى موضوع تقره الجامعة بعد موافقة مجلس القسم ومجلس الكلية ينتهى باعداد رسالة تقبلها لجنة التحكيم.

9- Students Assessment Methods: 9-طرق وقواعد تقييم الملتحقين بالبرنامج

م	الوسيلة	مخرجات التعلم المستهدفة
1	Written examination	To assess knowledge and understanding & intellectual skills: **2.a.1…….2.a.10., 2.b.1……2.b.٨.**
2	Oral examination	To assess knowledge and understanding, intellectual skills & General & transferable skills **2.a.1…….2.a.10., 2.b.1……2.b.٨., 2.d.1…..2.d.8.**
3	Practical & clinical examination	To assess knowledge and understanding, intellectual skills, Practical & Clinical skills, & General & transferable skills: **2.a.1…….2.a.10., 2.b.1……2.b.٨. 2.c.1……..2.c.7. and 2.d.1…..2.d.8.**
4	**Thesis Discussion**	To assess knowledge and understanding, intellectual skills, Practical & Clinical skills, & General & transferable skills: **2.a.1…….2.a.10., 2.b.1……2.b.8. 2.c.1……..2.c.7. and 2.d.1…..2.d.8.**

Final exam:

First part

المقرر	الاختبار	الدرجة				إجمالي
		تحريري	شفهي	عملي	إكلينيكي	
السموم المهنية	اختباران تحريريان مدتهما ثلاث ساعات + اختبار شفهي	30	20			100
والكيمياء الشرعية		30	20			
علم الأقربازين	اختبار تحريري مدته ساعة لكل مادة + اختبار شفهي	30	20			150
والكيمياء الحيوية		30	20			
وظائف الأعضاء		30	20			
الباثولوجيا الإكلنيكية	اختبار تحريري مدته ساعة + اختبار شفهي	30	20			50

طب الأطفال	اختبار تحريري مدته ساعة + اختبار شفهي	30	20			50
إجمالي الدرجة						350

Second part

المقرر	الاختبار	الدرجة				إجمالي
		تحريري	شفهي	إكلينيكي	عملي	
الطب الشرعي	اختبار تحريري مدة ثلاث ساعات + اختبار شفهي + اختبار عملي	200	80		120	400
السموم	اختباران تحريريان (مدة السموم ساعتان و الباطنه ساعه) + اختبار شفهي + اختبار إكلينيكي	125	50	75		350
الأمراض الباطنة		50	20	30		
إجمالي الدرجة						750

10- Evaluation of Program: 10 - طرق تقويم البرنامج:

Evaluator	Tools	Sample
Internal evaluator (s) مقييم داخلى	• Focus group discussion • Meetings • Questionnaire	Reports
External Evaluator (s) مقييم خارجى	• Reviewing according to external evaluator • Checklist report of NAQAA.	Reports
Senior student (s) طلاب السنة النهائية	مقابلات , استبيان	جميع الطلبة
Alumni الخريجون	مقابلات ،استبيان	عينة لا تقل عن ٥٠% من طلبة أخر ٣ دفعات
Stakeholder (s) أصحاب العمل	مقابلات ،استبيان	عينة ممثلة لجميع جهات العمل
Others طرق أخرى	none	----------

11: استراتيجيات التعليم و التعلم علي مستوي البرنامج:

١. استراتيجية التعلم النشط. Active learning

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

٣. استراتيجية التعليم المبنى على حل المشكلات. Problem-based learning

المسئول عن البرنامج : Prof. Dr. Ola Gabber Haggag

التوقيع التاريخ : / ٩ /٢٠١٣

توصيف المقررات Program courses

First part
1- Forensic Chemistry & Analytical toxicology
2- physiology
3- paediatric medicine
4- medical biochemistry
5- pharmacology
6- clinical pathology
7- occupational toxicology
Second part
1-clinical toxicology
2- forensic medicine
3- general medicine

Course Specification

Course title: Forensic chemistry and analytical toxicology
(Code): FORE 601b
Academic Year (2013 – 2014)

- **Department offering the course:** Forensic Medicine and clinical Toxicology
- **Major or minor elements of the program:** Major.
- **Academic level:** first part.
- **Date of specification approval:**

  - Department council, date **/ 9 / 2013 .**
  - Faculty council, date /9/2013 .

A) Basic Information:

- **Allocated marks:** 50 marks
- **Course duration: 15** weeks.
- **Teaching hours: 1** hours/week = **15** total teaching hours

B) Professional Information:

1- Overall Aims of the Course:

- To provide essential knowledge and skills of analytical toxicology related to their medico-legal practice.
- Provide essential knowledge and skills of forensic chemistry related to their medico-legal practice.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. ***Define*** physical evidence, types and its medico legal importance.

2.a.2.**State** different types of samples and their sources either in the field of forensic medicine or toxicology.

2.a.3. ***Describe*** different methods of detection, collection, preservation and analysis of toxicological samples.

2.a.4. ***Explain*** methods of sampling & analysis of different physical evidences in forensic practice (including DNA typing).

2.b. <u>Intellectual Skills</u>:

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

2.b.1***. Correlate*** between different physical evidences and different samples in case scenarios of forensic medicine or clinical toxicology to reach proper diagnosing of case.

2.b.2. ***Analyze*** different problems of interpretation of samples either in the field of forensic medicine or clinical toxicology.

2.b.3***. Interpret*** common medicolegal implications associated with DNA typing.

2.b.4. ***Analyze*** different risks of interpretation of physical evidence collection and preservation.

2.c. <u>General and transferable Skills</u>:

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

2.c.1. ***Retrieve***, manage, and manipulate information by all means, including electronic means, in a timely manner.

2.c.2. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.c.3. Establish life-long self-learning required for continuous professional development.

2.c.4. Work effectively as a member or leader of a health care team or other professional group.

2.c.5. Communicate effectively with physicians, other health professionals, and health related agencies.

2.c.6. Demonstrate compassion, integrity, and respect for all patient's rights and treat all patients equally regardless to their believes, culture and behavior.

3- Course contents:

Subject	Small group teaching / tutorials l (hrs)	Total (hrs)	% of Total
1- analysis of biological tissue for toxicological purposes.	3	3	3
2- sampling.	1	1	1
3- solvent abuse	1	1	1
4- autopsy finding of different toxins	3	3	3
5- Identification of Physical evidences	1	1	1
6- Identification of DNA.	3	3	3
7- Identification of Blood	1	1	1
8- Identification of Semen	1	1	1
9- Identification of Saliva	1	1	1
10- Identification of Hair, Identification of Fibers,etc	1	1	1
Total	**15**	**15**	**100%**

4- Teaching and learning methods:

METHODS USED:

1. Small group discussions: museum specimens, demonstration (slides photographs and Video films), models, case study.
2. Problem solving.
3. Self-learning.
4. Seminars.

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

1. Small group attendance.
2. Log book.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.

5-C) TIME SCHEDULE:

Exam	Week
first part exam	At week 24 (end of 1st part)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
exam : a- Written b- Oral	 3070 20	
Total	**50**	**100%**

5-E) Examinassions description:

Examination	Description
exam : a- Written c- Oral	 e.g. select (MCQs) & Supply (Short essay) questions, case study. e.g. How many sessions

6- List of references:

6.1- Basic materials:

Department books:

6.1. 1. Forensic medicine and toxicology

6.1. 2. Museum and practical books

6.2 Essential books (text books):

6.2.2. Principle of clinical toxicology.

6.2.3. Emergancy toxicology: Peter viccellio.

6.3 Recommended books:

6.3.1. Medical toxicology.

6.3.2. Lewis' Dictionary of Toxicology.

6.3.3. Biological weapons threat& control.

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:

- Department Lecture halls: 2
- Department lab
- Poison control unit (PCU).

Course coordinator: Prof. Dr. Ola Gabber Haggag

Head of department: Prof. Dr. Marcelle Ramsis Haroun

Date: 2013

Course Specification

Course title (Code): **Physiology** **FORE 602 c**

Academic Year (2013 – 2014)

- **Department offering the course:** medical Physiology
- **Major or minor elements of the program:** Minor.
- **Academic level:** first part.
- **Date of specification approval:**

  - Department council, date **/ 9 /2013**
  - Faculty council, date **/9/2013** .

A) Basic Information:

- **Allocated marks:** 50 marks
- **Course duration** 15 weeks.
- **Teaching hours:** **1** hours/week = **15** total teaching hours

B) Professional Information:

1- Overall Aim of the Course:

- Introduction of the basic facts of physiology for the medical students.
- Helps the students to understand & interpret many medical problems specially those related to forensic medicine and clinical toxicology.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. Describe General & specific functions of the studied body systems.

2.a.2. Explain some pathophysiological aspects underlying the development of common diseases.

2.b. Intellectual Skills:

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

2.b.1. **Analyze** medical problems related to diagnosis & treatment of physiological problems as: pH, osmolarily, etc....
2.b.2. **interpret** scientific phenomena during the practical study

c. General and transferable Skills:

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

2.c.1. **Develop** of the capacity of free discussion of medical problems.

2.c.2. **Establish** life-long self-learning required for continuous professional development.

2.c.3. **Use** the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.c.4. **Retrieve**, manage, and manipulate information by all means, including electronic means.

2.c.5. **Establish** effective interpersonal relationship to Communicate ideas and arguments.

3- Course contents:

Subject	Small group discussion (hrs)	Total (hrs)	% of Total
Introduction	1 hour	1 hour	6.7%
Body fluid compartments.	1 hour	1 hour	6.7%

Autonomic nervous system: Neurotransmitter, control of autonomic flow, neuromuscular junction & excitatability	4 hours	4 hours	26.6%
Skeletal muscle : Excitation – contraction coupling	3 hours	3 hours	20%
Respiration → Gas exchange – Gas transport	3 hours	3 hours	20%
Circulation: -Cardiac properties, Heart Rate	3 hours	3 hours	20%
Total	**15**	**15**	**100%**

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

<u>METHODS USED:</u>

1. Small group discussions: Seminars & Tutorials.

<u>TEACHING PLAN:</u>

Time plan:

Item	Time schedule	Teaching hours	Total hours
Small group discussions: Seminars & Tutorials	<u>1 h</u> /week;	15 hours	
Total	1 hour/week	15 hours	

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

5-A) <u>ATTENDANCE CRITERIA</u>: Faculty bylaws

5-B) <u>Assessment TOOLS:</u>

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.

5-C) <u>TIME SCHEDULE</u>:

Exam	Week
Final examination	At end of the week 24 (1st part)

5-D) <u>Weighting System:</u>

Examination	Marks allocated	% of Total Marks
examination a _Written b- Oral	 30 20	
Total	**50**	**100%**

FORMATIVE ASSESSMENT:
Student knows his marks after the Formative exams.

5-E) <u>Examinassions description:</u>

Examination	Description
- Final exam: a- Written b- Oral	 e.g. select (MCQs) & Supply (Short essay) questions e.g. How many sessions
Assignments & other activities	e.g. Assignments, projects, practical books etc

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

6.a. Basic materials:

6.a.1 Department book:

6.b. Essential books (text books):

6.b.1. Textbook of Medical Physiology, Arthur C. Guyton, John E. Hall.

6.b.2 Physiology of Robert M. Berne

6.c. Recommended books:

6.c.1. Principles of Physiology, Robert M. Berne (Editor), Matthew N. Levy

6.d. Periodicals, Web sites, etc:

6.d.1.http://www.medscape.com.

6.d.2.http://www.pubmed.com.

6.d.3.http://master.emedicine.com/maint/cme.asp.

6.d.4.http://www.science direct.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:

Course coordinator:

Date: 2013

Course Specification

Course title (Code): **Pediatric Medicine** **FORE 604**

Academic Year (٢٠١٣ – ٢٠١٤)

- **Department offering the course: pediatric**
- **Academic year of M.Sc. program: ٢٠١٣**
- **Major or minor elements of the program:** Minor.
- **Academic level:** first part.
- **Date of specification approval:**

  - Department council, date **/ 9 /٢٠١٣**
  - Faculty council, date **/9/٢٠١٣** .

A) Basic Information:

- **Allocated marks:** 50 marks
- **Course duration** **15** weeks
- **Teaching hours: 1** hours/week = **15** total teaching hours

Professional Information

1- Overall Aims of the course:

The postgraduate student of M.sc. degree of Forensic medicine & Clinical toxicology should be able to:-

- Provide basic and specialized pediatric knowledge in relation with Medico Legal responsibilities in the practice of medicine.

2- Intended Learning Outcomes (ILOs)

2.a Knowledge and understanding:

By the end of the course the graduate will be able to:

2.a.1. Describe general management of child poisoning.

2.a.2. Explain manchusean syndrome

2.a.3. List diagnosis & management of pediatric cases.

2.a.4 Describe the clinical manifestations and differential diagnosis of common pediatric cases.

2.a.5. Mention the effect of drugs on lactating women.

2.a.6. Identify the principles that govern ethical decision making in clinical practice as well as the medicolegal aspect of medical malpractice.

2.a.7. Define sexual child abuse, infanticide, battered child $, sudden infant death $

2.b. Intellectual skills:

By the end of the course the graduate will be able to:

2.b.1. Diagnose, problem solving and decision making skills necessary for proper evaluation and management.

2.b.2. Combine the clinical and investigational database to be proficient in clinical problem solving.

2.c. General and Transferable skills:

By the end of the course the graduate will be able to:

2.c.1. Learn how to put rules &regularities for evaluation of performance of others.

2.c.2. Establish life-long self-learning required for continuous

Professional development.

2.c.3. Learn how to use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.c.4. Retrieve, manage, and manipulate information by all means, including electronic means.

Course contents

Subject	Small group discussion (hrs.)	Total (hrs.)	% of Total
1- General management of child poisoning.	3 hours	3 hours	20%
2- Manchusean $,	1 hour	1 hour	6.6%
3- Drug & lactation.	1 hour	1 hour	6.6%
4- Therapeutics.	3 hours	3 hours	20%
5- Infanticides.	1 hour	1 hour	6.6%
6- Sexual child abuse.	2 hours	2 hours	13.2%
7- Heavy metals,	1 hour	1 hour	6.6%
8- Chemical pollutants.	1 hour	1 hour	6.6%
9- Battered child $,	1 hour	1 hour	6.6%
10- sudden infant death $)	1 hour	1 hour	6.6%
total	**15 hours**	**15 hours**	**100%**

4- Teaching and learning methods:

METHODS USED:

1. Small group discussions: Seminars, case study.
2. Case study.

TEACHING PLAN:

Item	Time schedule	Teaching hours
Small group discussions Self-learning	1 h /week;	15 hours
Total	1 hour/week	15 hours

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

5- A) ATTENDANCE CRITERIA: Faculty bylaws

5- B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.

5- C) TIME SCHEDULE:

Exam	Week
Final examination	At end of week 24 (1st part)

5- D) Weighting System:

Examination	Marks allocated	% of Total Marks
Final examination a _Written b- Oral	 30 20	
Total	**50**	**100%**

FORMATIVE ASSESSMENT:
Student knows his marks after the Formative exams.

5- E) Examinassions description :

Examination	Description
Final exam: a- Written c- Oral	 e.g. select (MCQs) & Supply (Short essay) questions e.g. How many sessions
6- Assignments & other activities	e.g. Assignments, projects, practical books etc

6- List of references:

6.a. Basic materials:

- e.g. Department book:

6.b. Essential books (text books):

6.b.1. Nelson Textbook of Pediatrics

6. b.2 Current Pediatric Diagnosis & Treatment

6.c. Recommended books:

6.c.1. Textbook of Clinical Pediatrics, Elzouki, A.Y., Harfi, H.A., Nazer, H., Oh, W., Stapleton, F.B.,Whitley, R.J.

6.4. Periodicals, Web sites, etc:

6.4.1.http://www.medscape.com.
6.4.2.http://www.pubmed.com.
6.4.3.http://master.emedicine.com/maint/cme.asp.
6.4.4.http://www.science direct.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:

Course coordinator:

Date: 2013

Course Specification

Course title (Code): **Medical Biochemistry** **FORE 602 b**

Academic Year (2013 – 2014)

- **Department offering the course: Medical Biochemistry Academic year of M.Sc. program.**
- **Major or minor elements of the program:** Minor.
- **Academic level:** first part.
- **Date of specification approval:**

  - Department council, date **/ 9 /2013**
  - Faculty council **/9/2013** .

A) Basic Information:

- **Allocated marks:** 50 marks
- **Course duration** **15** weeks
- **Teaching hours:** **1** hours/week = **15** total teaching hours

Professional Information

1- Overall Aims of the course:

The postgraduate student of M.sc. degree of Forensic medicine & Clinical toxicology should be able to:-

- Application of basic scientific knowledge and essential intellectual skills of the biochemistry for the practice of forensic medicine and clinical toxicology.

2- Intended Learning Outcomes (ILOs)

2.a Knowledge and understanding:

By the end of the course the graduate will be able to:

2.a.1. **Describe** the structure,classification and properties of carbodydrates of biological importance.
2.a.2. **Describe** the structure and properties of proteins.
2.a.3. Identify sources, metabolism and pharmacodynamics of lipids.
2.a.4. **Identify** enzymes (sources, metabolism, pharmacodynamics).

2.b. Intellectual skills:

By the end of the course the graduate will be able to:

2.b.1. **Correlate** biochemical alterations with clinical data to reach etiology,diagnosis and treatment.

2.b.2. **Determine** the biochemical basis of some physiological processes occurring in the body and some forensic and toxicological problems.

2.c. General and Transferable skills:

By the end of the course the graduate will be able to:

2.c.1. Establish life-long self-learning required for continuous Professional development.

2.c.2. use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.c.3. Retrieve, manage, and manipulate information by all means, including electronic means.

Course contents

Subject	Small group discussion (hrs.)	Total (hrs.)	% of Total
Carbohydrates	3 hours	3 hours	20%

Lipid	3 hours	2 hours	20%
Protein	3 hours	3 hours	20%
Molecular biology	4 hours	4 hours	26.8%
Enzymes	2 hours	2 hours	13.2%
TOTAL	**15 hours**	**15 hours**	**100%**

4- Teaching and learning methods:

METHODS USED:

1. Small group discussions.
2. Self-learning.

TEACHING PLAN:

Time plan:

Item	Time schedule	Teaching hours
1. Small group discussions. 2. Self-learning.	1 h /week;	15 hours
Total	1hours/week	15hours

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

5-A) ATTENDANCE CRITERIA: Faculty bylaws

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.

5-C) TIME SCHEDULE:

Exam	Week

Final examination	At end of week 24 (1st part)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
Final examination a _Written c- Oral	 30 20	
Total	**50**	**100%**

FORMATIVE ASSESSMENT:
Student knows his marks after the Formative exams.

5-E) Examinassions description:

Examination	Description
Final exam: a- Written b- Oral	 e.g. select (MCQs) & Supply (Short essay) questions e.g. How many sessions
Assignments & other activities	e.g. Assignments, projects, practical books etc

6- List of references:

6.1- Basic materials:

-Department book

-Overhead projections and computer presentations used during teaching in Lectures or tutorial classes.

-Practical notes

6.2- Essential books (text books):

- DM Vasudevan and Sreekumari S (2007): Text book of biochemistry for medical students. 5th edition. Jaypee Brothers Medical Publishers.

-Pamela C. Champe, Richard A. Harvey and Denise R. Ferrier (2010):Lippincott's Illustrated Biochemistry. 5th edition.

6.3- Recommended books:

-Robert K. Murray, David A Bender, Kathleen M. Botham, Peter J. Kennelly, Victor W. Rodwell, P. Anthony Weil (2009): Harper's Illustrated Biochemistry, 29th edition

6.4. Periodicals, Web sites, etc:

6.4.1.http://www.medscape.com.
6.4.2.http://www.pubmed.com.
6.4.3.http://master.emedicine.com/maint/cme.asp.
6.4.4.http://www.science direct.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls: Faculty lecture hall and department lecture hall
- Department equipped laboratories: 3
- Information technology / AV aids

Course coordinator: prof amal aboelfadal
Date: 2013

Course Specification

Course title (Code): **Pharmacology** **FORE 602 a**

Academic Year (٢٠١٣ – ٢٠١٤)

- **Department offering the course: clinical pharmacology**
- **Major or minor elements of the program:** Minor.
- **Academic level:** first part.
- **Date of specification approval:**

  - Department council, date **/ 9 /2013**
  - Faculty council, date **/9/2013** .

A) Basic Information:

- **Allocated marks: 50** marks
- **Course duration 15** weeks .
- **Teaching hours:** **1** hours/week = **15** total teaching hours

Professional Information

1- Overall Aims of the course:

The postgraduate student of M.sc. degree of Forensic medicine & Clinical toxicology should be able to:-

- Apply of basic scientific knowledge and intellectual skills in pharmacology essential to practice forensic medicine and clinical toxicology.

2- Intended Learning Outcomes (ILOs)

2.a Knowledge and understanding:

By the end of the course the graduate will be able to:

2.a.1 **explain** pharmacological issues with an insight of the general principles, the mechanisms of action and the fate of chemicals inside the body.

2.a.2 **Describe** the drug mechanisms on the treatment of selected diseases.

2.a.3 **List** the therapeutic and toxic effects of drugs with suitable methodology of pharmacology, and toxicology.

2.b. Intellectual skills:

By the end of the course the graduate will be able to:

2.b1. Combine the clinical and investigational database to be proficient in clinical problem solving.

2.b.2. Select the most appropriate and cost effective diagnostic procedures for each problem.

2.c. General and Transferable skills:

By the end of the course the graduate will be able to:

2.c.1. Establish life-long self-learning required for continuous Professional development.

2.c.2. use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.c.3. Retrieve, manage, and manipulate information by all means, including electronic means.

contents

Subject	Tutorial / Small group discussion (hrs)	Total (hrs)	% of Total
Pharmacokinetics and pharmacodynamics of CNS drugs	3 hours	3 hours	20 %
Pharmacokinetics and pharmacodynamics of CVS drugs	3 hours	3 hours	20 %
Pharmacokinetics and pharmacodynamics of GIT drugs	3 hours	3 hours	20 %
Pharmacokinetics and pharmacodynamics of hypoglycemic drugs	3 hours	3 hours	20 %
Drugs contraindicated during breast feeding	3 hours	3 hours	20 %
TOTAL	**15 hour**	**15 hours**	**100%**

4- Teaching and learning methods:

METHODS USED:

1. Small group discussions.

TEACHING PLAN:

Item	Time schedule	Teaching hours	Total hours
Small group discussions	1 h /week; one hour each between to	15hours	
Total	1 hour/week	15 hours	

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

5-A) <u>ATTENDANCE CRITERIA</u>: Faculty bylaws

5-B) <u>Assessment TOOLS:</u>

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.

5-C) <u>TIME SCHEDULE</u>:

Exam	Week
Final examination	24 week (end of 1st part)

5-D) <u>Weighting System:</u>

Examination	Marks allocated	% of Total Marks
Final examination: a _Written b - Oral	 30 20	
Total	**50**	**100%**

FORMATIVE ASSESSMENT:
Student knows his marks after the Formative exams.

5-E) <u>Examinassions description:</u>

Examination	Description
Final exam: a- Written b- Oral	 e.g. select (MCQs) & Supply (Short essay) questions e.g. How many sessions
6- Assignments & other activities	e.g. Assignments, projects, practical books etc
Total	_

6- List of references:

6.a- Basic materials:

-Department book

-Overhead projections and computer presentations used during teaching in Lectures or tutorial classes.

6.b- Essential books (text books):

-Medical Pharmacology and Therapeutics, By Derek G. Waller, Published October 2009.

-A Text book of Pharmacology and Therapeutics by Arthur Robertson Cushny

6.c- Recommended books:

-Complete Textbook Of Medical Pharmacology Set Of 2 Vols by Sk Srivastava.

6.4. Periodicals, Web sites, etc:

6.4.1.http://www.medscape.com.
6.4.2.http://www.pubmed.com.
6.4.3.http://master.emedicine.com/maint/cme.asp.
6.4.4.http://www.science direct.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls: Faculty lecture hall and department lecture hall
- Department equipped laboratories: 3
- Information technology / AV aids

Course coordinator: prof mohand shehab
Date: 2013

Course Specification

Course title (Code): **Clinical pathology** **FORE 603**

Academic Year (2013 – 2014)

- **Department offering the course: Clinical pathology**
- **Major or minor elements of the program:** Minor.
- **Academic level:** first part.
- **Date of specification approval:**

  - Department council , date **/ 9 /2013**
  - Faculty council , date 9/2013

A) Basic Information:

- **Allocated marks:** 50 marks
- **Course duration** **15** weeks
- **Teaching hours: 1** hours/week = **15** total teaching hours

B) Professional Information:

1- Overall Aim of the Course:

- The aim of the course is to provide the postgraduate with medical knowledge and skills essential for clinical toxicologist

2- Intended Learning Outcomes (ILOs):

2. a. Knowledge and understanding:

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

2.a.1. Identify clinical significance of different toxicological screening.

2.a.2. Identify different types of quantitative & qualitative methods of toxicological analysis.

2.a.3. Describe lab measurement for evaluation of liver and kidney function

and acid base disturbance

2.b. Intellectual Skills:

2b.1 Select from different analytical methods to reach a final diagnosis.

2b.2 Interpret the result of analysis of blood gas, blood picture, bone marrow, liver and renal function reports covering the most important medical conditions.

2b.3 Analyze reading of research and issues related to the clinical pathology and serve the clinical toxicology.

2 b.4 interpret toxicological problems and find solutions

2.c. General and transferable Skills:

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

2c.1 Gain capabilities and skills of communications with fellows.

2c.2 Communicate effectively with patients and their families.

2c.3 Deal perfectly with the computer.

2c.4 Assess himself and identify personal learning needs.

2c.5 Use different sources for information and knowledge.

3- Course contents:

Subject	Small group discussion (hrs)	Total (hrs)	% of Total
1- analysis of biological tissue for toxicological purposes.	4 hours		26.7%
2- sampling.	2 hours		13.2%

3 -Investigation of Drugs	**4 hours**		26.7%
4- drug screens	**5 hours**		33.4%
total	**15 hours**	**15 hours**	**100%**

4- Teaching and learning methods:

METHODS USED:

1. Small group discussions: Seminars, Tutorials.
2. Self-learning.

TEACHING PLAN:

Item	Time schedule	Teaching hours
Small group discussions: Seminars, Tutorials. Self-learning	1 h /week;	15 hours
Total	1 hour/week	15hours

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

5-A) ATTENDANCE CRITERIA: Faculty bylaws

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.

5-C) TIME SCHEDULE:

Exam	Week
Final examination	At end of week 24

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
final exam: a _Written c- Oral	 30 20	
Total	**50**	**100%**

FORMATIVE ASSESSMENT:
Student knows his marks after the Formative exams.

5-E) Examinassions description:

Examination	Description
Final exam:	
a- Written	e.g. select (MCQs) & Supply (Short essay) questions
c- Oral	e.g. How many sessions

6- List of references:

6.a. Basic materials:
6.a.1 Department book:
6.a.2. seminars of department

6.b. Essential books (text books):
6.b.1. Laboratory Medicine : Essentials Of Anatomic And Clinical Pathology , John H. Dirckx.
6.b.2 Laboratory Tests And Diagnostic Procedures In Medicine , John H. Dirckx

6.c. Recommended books:
6.c.1. Clinical Chemistry : Laboratory Perspective ,Wendy L. Arneson And Jean Brickell

6.d. Periodicals, Web sites, etc:

6.d.1.http://www.medscape.com.
6.d.2.http://www.pubmed.com.
6.d.3.http://master.emedicine.com/maint/cme.asp.
6.d.4.http://www.science direct.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:

Course coordinator: prof aza abosenna

Date: 2013

Course Specification

Course title (Code): **Occupational toxicology FORE 601b**

Academic Year (2013 – 2014)

- **Department offering the course:** Forensic Medicine and clinical Toxicology
- **Major or minor elements of the program:** Minor.
- **Academic level:** first part.
- **Date of specification approval:**

  - Department council, date **/ 9 /2013**
  - Faculty council , date /9 /2013 .

A) Basic Information:

- **Allocated marks:** 50 marks
- **Course duration** 15 weeks.
- **Teaching hours:** **1** hours/week = **15** total teaching hours

B) Professional Information:

1- Overall Aims of the Course:

- To gain knowledge & skills necessary for proper diagnosis and management of patients in the field of toxicology including diagnostic, problem solving and decision making.

2- Intended Learning Outcomes (ILOs):

a. Knowledge and understanding:

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

2.a.1 List the effects of a given toxicological substance on the human body

2.a.2 Mention the various occupational hygiene methodologies available to address a workplace issue

2.a.3 Explain how occupational exposures to toxic substances can occur
2.a.4 Describe the effectiveness of the prevention measures available to protect employees and others from toxic substances

2.b. Intellectual skills:

By the end of the course the graduate will be able to:

2.b.1. Combine the clinical and investigational database to be proficient in clinical problem solving.
2.b.2. Select the most appropriate and cost effective diagnostic procedures for each problem.
2.b.3. Adopt the questioning approach to own work & that of others to solve clinical problems
2.b.4. Analyze case scenarios in the field of occupational toxicology to diagnose and management of toxicological case study.

2.c. General and Transferable skills:

By the end of the course the graduate will be able to:

2.c.1. Establish life-long self-learning required for continuous Professional development.

2.c.2. use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.c.3. Retrieve, manage, and manipulate information by all means, including electronic means.

3- Course contents:

Subject	Small group discussion (hrs.)	Total (hrs.)	% of Total
1-**Introduction to occupational toxicology**	2 hours	2 hours	13.2%

2-**Targets of chemicals**. **a- Systemic toxicology** **b- Occupational respiratory diseases** **c- Occupational skin diseases** **d- Occupational toxicology of the liver** **e- Occupational toxicology of the kidney** **f- Occupational toxicology of the nervous system** **g- Reproduction, development and work**	5 hours	5 hours	33.3%
3- Toxicity by group of chemical **a- Toxicity of metals** **b- Toxicity of pesticides** **c- Toxicity of organic solvents** **d- Toxicity of gases, vapors and particulates**	5 hours	5 hours	33.3%
4- Uses of toxicological data **a- Chemicals, workplaces and the law.** **b- Workplace assessment of toxic chemicals.**	3 hours	3 hours	21.2%
Total	**15 hour**	**15 hour**	**100%%**

4- Teaching and learning methods:

METHODS USED:

1. Small group discussions: Seminars, case study.
2. Problem solving.
3. Self-learning.

TEACHING PLAN:

Item	Time schedule	Teaching hours	Total hours

Small group discussions: Seminars, case study. Problem solving. Self-learning.	1 h /week;	15 hours	
Total	1hour/week	15hours	

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

5-A) <u>ATTENDANCE CRITERIA</u>: Faculty bylaws

5-B) <u>Assessment TOOLS:</u>

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.
Practical examination	To assess practical skills.

5-C) <u>TIME SCHEDULE</u>:

Exam	Week
Final examination	At end of 1st part (week 24)

5-D) <u>Weighting System:</u>

Examination	Marks allocated	% of Total Marks
<u>final exam:</u> a _Written b- Oral	 30 20	
Total	**50**	**100%**

FORMATIVE ASSESSMENT:
Student knows his marks after the Formative exams.

5-E) <u>Examinassions description:</u>

Examination	Description

5- Final exam: a- Written c- Oral	 e.g. select (MCQs) & Supply (Short essay) questions, case study. e.g. How many sessions

6- List of references:

6.a. Basic materials:

- e.g. Department book:
- department seminars

6.b. Essential books (text books):

6.b.1. **Occupational Toxicology by Chris Winder and Neill Stacey**

6.b.2 gold frank of toxicology

6.b.3 **Dart's of toxicology, Ellen horn**

6.c. Recommended books:

6.c.1. **Cassette and Doll in toxicology**

6.d. Periodicals, Web sites, etc:

6.d.1.http://www.medscape.com.

6.d.2.http://www.pubmed.com.

6.d.3.http://master.emedicine.com/maint/cme.asp.

6.d.4.http://www.science direct.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls

Course coordinator:
Prof. Dr. Marcelle Ramsis Haroun

Date: 2013

Course Specification

Course title: Clinical Toxicology
Code: FORE 606a
Academic Year (2013 – 2014)

- **Department offering the course**: Forensic Medicine and clinical Toxicology
- **Major or minor elements of the program:** Major.
- **Academic level:** second part.
- **Date of specification approval:**

  - Department council, date **/ 9 / 2013.**
  - Faculty council, date **/ 9 / 2013**.

A) Basic Information:

- **Allocated marks:** **250** marks
- **Course duration:** **30** weeks
- **Teaching hours:** **7** hours/week = **210** total teaching hours

B) Professional Information:

1- Overall Aims of the Course:

- To provide students with essential knowledge and skills necessary for practicing clinical toxicology.
- To use ethical and professional education necessary for establishment of good communication with patients and colleagues.
- To learn competencies necessary for continuous professional development.

2- Intended Learning Outcomes (ILOs):

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. ***Describe*** different classes of common toxic substances and environmental pollutants, circumstances of intoxication, toxic dose, toxic kinetics, clinical picture, different diagnosis of toxicity of different drugs and toxic substances including (therapeutics, heavy metals, plant, animal, toxic gases and food poisoning).

2.a.3. ***Explain*** general management of poisoned patient (alert and comatose) and antidotal measure for different studied drugs and toxic substances.

2.a.4. ***Mention*** medico legal aspect of dependence; describe ethanol intoxication, toxic alcoholics and different studied drugs of dependence and abuse.

2.b. <u>Intellectual Skills</u>:

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

2.b.1. Provide a diagnostic approach necessary for proper diagnosis and management of intoxicated cases.

2.b.2***. Interpret*** common ethical dilemmas met in clinical toxicology practice and suggest a proper solution.

2.b.3. ***Analyze*** case scenario of intoxicated patient and formulate treatment plan.

2.c. <u>Practical and Clinical Skills</u>

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

2.c.1. Write primary and expert toxicological reports.

2.c.2. Perform proper physical examination of the intoxicated patients.

2.c.3.Diagnose different cases of poisonings and intoxications using

different methods of diagnosis including laboratory investigations.

2.c.4. ***Manage*** different toxicological cases, through the followings:

- ***Apply*** ABC (patent airway, breathing and circulation) for life saving of patients.
- ***Perform*** gastric lavage.
- ***Insert*** Ryle tube

2.d. <u>General and Transferable skills</u>:

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

2.d.1. ***Demonstrate*** respect to all patients irrespective of their socioeconomic levels, culture or religious beliefs using appropriate language to establish a good patient-physician relationship.

2.d.2. ***Respect*** the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.d.3. ***Communicate*** clearly, sensitively and effectively with patients and their relatives, and colleagues from a variety of health and social care professions.

2.d.4. ***Communicate*** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.d.5. Establish life-long self-learning required for continuous professional development.

2.d.6. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.d.7. Retrieve, manage, and manipulate information by all means, including electronic means.

3- Course contents:

Subject		Tutorial / Small group discussion (hrs)	Practical/ clinical (hrs)	Total (hrs)	% of Total
1- General toxicology		5	10		
2-Theraputics poisoning		10	20		
3-Food Poisoning		10	10		
4-heavy metals		10	10		
5-enviromental toxicology		20	10		
6-drug dependence		30	15		
7-Animal, Plant poisoning		20	5		
8- miscellaneous poisonings		15	10		
Total		**120**	**90**	**210**	**100%**

4- Teaching and learning methods:

METHODS USED:

- Small group discussions: Seminars , demonstration (slides photographs and Video films), models, case study.
- Problem solving.
- Self-learning.
- Clinical visit to hospital emergency department.
- Clinical visit to poison control center.

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

1. Practical attendance.
2. Small group attendance.

3. Log book.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	**2.a.1…..2.a.4.,** **2.b.1……2.b.3.**
Oral examination	**2.a.1…..2.a.4.,** **2.b.1……2.b.3.** **2.d.1…..2.d.7.**
Practical examination	**2.c.1……2.c.4.**

5-C) TIME SCHEDULE:

Exam	Week
second part exam	At the end of week 72

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
exam : a- Written b- clinical c- Oral	 125 75 50	
Total	**250**	**100%**

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinassions description:

Examination	Description

exam :	
a- Written	e.g. select (MCQs) & Supply (Short essay) questions, case study.
b- clinical	e.g. perform physical exam, write toxicological reports
c- Oral	e.g. How many sessions

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, 9th ed., **(2007).**

6.2- Essential books (textbooks):

- Poisoning & Drug Overdose. By: ***Olson, K.R.*** (ed.), Lange medical books/McGraw-Hill, New York, Chicago, Toronto, **(2007).**

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, 8th ed., **(2006).**
- Clinical Toxicology. By: ***Ford, M.D.; Delaney, K.A.; Ling, L.J. et al.*** (eds.), W.B. Saunders Co., Philadelphia, 1st ed., **(2001).**

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::

- Department Lecture halls: 2
- Department lab
- Poison control unit (PCU).

Course coordinator:

Prof. Dr. Ola Gabber Haggag

Date: 2013

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

Course Specification

Course title: Forensic Medicine
(Code): FORE 605
Academic Year (2013 – 2014)

- **Department offering the course:** Forensic Medicine and clinical Toxicology
- **Major or minor elements of the program:** Major.
- **Academic level:** second part.
- **Date of specification approval:**

  - Department council, date **/ 9 / 2013.**
  - Faculty council , date **/ 9 / 2013.**

A) Basic Information:

- **Allocated marks:** 400 marks
- **Course duration:** **30** weeks
- **Teaching hours:** **12** hours/week = **360 hs** total teaching hours

B) Professional Information:

1- Overall Aims of the Course:

- To provide the postgraduate student with essential knowledge and skills necessary for the practice of forensic medicine either (clinical forensic medicine or forensic pathology).
- To Solve the running problems as sexual offences criminal assaults and aware of recent ideas as DNA typing in forensic medicine.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. ***Define*** death and its phases, death like state, sudden death, brain death, and its ethics and implication, the cause, mechanism, mode, manner of death, medico legal deaths and the objectives of their investigation and their handling, postmortem changes and their importance in determining the time of death.

2.a.2. ***Describe*** unknown body identification whether living or dead; ages of medico legal importance in Egypt, methods of stains identification (blood, seminal and salivary stains), hairs, teeth, and their medico legal importance; illustrate the scientific basis of DNA typing and their medico legal importance.

2.a.3. ***Mention*** different types of wound patterns including regional injuries, mechanisms of death from wound, injuries due to physical agents (heat, cold and electricity), different types of asphyxia, causes and mechanisms of death associated with surgery and anesthesia.

2.a.4. ***Explain*** different types of sexual offences, methods of initiating pregnancy and their ethics; medico legal aspect of pregnancy, delivery, abortion, death and injury in infancy and childhood.

2.a.5. ***List*** types of malpractice, basic background of ethics of medical practice and bioethics.

2.a.6. ***Enumerate*** methods of torture, its causes and mechanisms of death especially child abuse.

2.b. Intellectual Skills:

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

2.b.1***. Interpret*** common ethical dilemmas in medical practice and

suggest a proper solution.

2.b.2. ***Analyze*** case scenario of clinical forensic medicine and forensic pathology and their medicolegal aspects.

2.c. <u>Practical and Clinical Skills</u>

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

2.c.1. Diagnose death by different clinical and investigatory methods.

2.c.2. Write death certificate according to the international form of medical certificate of the cause of death.

2.c.3. Identify living, dead individuals, sex and ages from bones and by using the X rays films.

2.c.4. Write medicolegal reports on different museum specimens.

2.c.5. Write a proper primary wound report on wounds photographs.

2.c.6. Write postmortem examination (autopsy) a report on a case scenario.

2.d. General and transferable skills:-

By the end of the course, students 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, integrity, and respect for all patient's rights and treat all patients equally regardless to their believes, culture and behavior.

3- Course contents:

Subject	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1- death, brain death, postmortem, sudden death	20	30		
2-identification	40	50		
3-wounds, special injuries	30	40		
4-sexual offenses, pregnancy and delivery	20	20		
6-Torture, child abuse, SIDS, infanticide	30	10		
6-asphyxia, physical injuries	30	30		
7- medical malpractice and biomedical ethics	10			
Total	**180**	**180**	**360**	**100%**

4- Teaching and learning methods:

METHODS USED:

- Small group discussions: Seminars, museum specimens
- Problem solving.
- Self-learning.
- Practical classes

5- Students Assessment methods:

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

1. Practical attendance.

2. Small group attendance.

3. Log book.

5-B) <u>Assessment TOOLS:</u>

Tool	Purpose (ILOs)
Written examination	**2.a.1……..2.a.6., 2.b.1…….2.b.3**
Oral examination	**2.a.1……..2.a.6., 2.b.1…….2.b.3, 2.d.1…….2.d.6.**
Practical examination	**2.c.1……2.c.6.**

5-C) <u>TIME SCHEDULE</u>:

Exam	Week
2- second part exam	At the end of week 72

5-D) <u>Weighting System:</u>

Examination	Marks allocated	% of Total Marks
second part exam : a- Written b- Practical c- Oral	 200 120 80	
Total	**400**	**100%**

FORMATIVE ASSESSMENT:
Student knows his marks after the Formative exams.

5-E) <u>Examinassions description:</u>

Examination	Description
second part exam : a- Written	e.g. select (MCQs) & Supply (Short essay) questions, case study.
b- Practical	e.g. Different studied medicolegal reports
c- Oral	e.g. How many sessions

6- List of references:

6.1- Basic materials:

- Simpson's Forensic Medicine: Shepherd, R. (ed.), Arnold press, London, 12th ed. (2003).

6.2 Essential books (text books):

6.2.1forensic pathology: Bernard Knight.

2.6.2. Forensic pathology: Daimio & Daimio 2002.

6.3 Recommended books:.

6.3.2. Forensic Medicine An illustrated reference.

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:

- Department Lecture halls: 2
- Museum hall:6th floor
- Department lab

Course coordinator:
Prof. Dr. Ola Gabber Haggag

Head of department:
Prof. Dr. Marcelle Ramsis Haroun

Date: **2014.**

Course Specification

Course title **General medicine**
(Code): **FORE 606b**
Academic Year (2013 – 2014)

- **Department offering the course: General medicine**
- **Major or minor elements of the program:** Minor.
- **Academic level:** second part.
- **Date of specification approval:**

  - Department council , date **/ 9 /2013.**
  - Faculty council , date ***/9/2013*** .

A) Basic Information:

- **Allocated marks:** 100 marks
- **Course duration** 30 weeks
- **Teaching hours:** **4** hours/week = **120** total teaching hours

B) Professional Information:

1- Overall Aim of the Course:

- To provide good basic scientific knowledge about common medical diseases in studied medical branches (cardiovascular-respiratory, etc…… ….)
- To accept sufficient clinical skills how to take history of the patient how to examine different systems of the body with stress on data help in diagnosis.
- To correlate between different studied medical disease and their related toxic and forensic subjects

2- Intended Learning Outcomes (ILOs):

2.a Knowledge and understanding:

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

2.a.1 List 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 Mention basis scientific knowledge about diagnosis of toxicological cases.

2.b. Intellectual Skills

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

2.b.1. Interpret the clinical and investigational database to be proficient in clinical problem solving.

2.b.2. Analyze different technical skills that could help us during diagnosis of different toxicological cases.

2.b.3. Analyze case scenarios to set an approach to solve

clinical problems.

2.b.4. Choose the questioning approach to own work & that of others to solve clinical problems

2.c. Practical and Clinical Skills:

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

2.c.1. Diagnose the toxic coma and differentiate between it and other medical causes of coma.

2.c.2. Perform physical examination of different systems successfully.

2.c.3. Take a detailed medical history of patients.

2.c.4. Establish different investigatory tools that help us in their practical field.

2.c.5. Perform the different technical skills essential for diagnosis and management of toxicological cases.

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. Able to do self-criticism.

2.d.6. Retrieve, manage, and manipulate information by all means, including electronic means.

3- Course contents:

Subject	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1- Drugs induced MI& angina	1 hour	3 hours	4 hours	3.3%
2- Drugs induced heart failure	3 hours	9 hours	12hours	10%
3- Drugs induced hepatotoxicity	3 hours	9 hours	12hours	10%
4- Drugs induced respiratory failure	2 hour	6 hours	8 hours	6.6%
5- Drugs induced electrolyte disturbances	2 hours	6 hours	8 hours	6.6%
6- Drugs induced acid base disturbance	2 hour	6 jours	8 hours	6.6%
7- Drugs induced nephrotoxicity	3 hours	9 hours	12hours	10%
8- Drugs induced metabolic disease	3 hours	9 hours	12hours	10%
9- Shock	4 hours	12 hour	16hours	15.3%
10- encephalopathy	3 hours	9 hours	12hours	10%

11- coma	4 hours	12 hour	16hours	15.3%
Total	**30 hour**	**90 hour**	**120hours**	**100%**

4- Teaching and learning methods:

METHODS USED:

1. Small group discussions: seminars, case study.
2. Problem solving.
3. Clinical visit to hospital emergency department.
4. Clinical visit to poison control center.

TEACHING PLAN:

Item	Time schedule	Teaching hours
1. Small group discussions: seminars, case study. 2. Problem solving.	1h /week;	30 hours
3. Clinical visit to hospital emergency department. 4. Clinical visit to poison control center	3 hours / week	90 hours
Total	**4 hours/week**	**120 hours**

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

5-A) ATTENDANCE CRITERIA: Faculty bylaws

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.
Practical examination	To assess practical skills.

5-C) TIME SCHEDULE:

Exam	Week
Final examination	At end of 2nd part

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
final exam: a _Written b- clinical c- Oral	 50 30 20	
Total	**100**	**100%**

FORMATIVE ASSESSMENT:
Student knows his marks after the Formative exams.

5-E) Examinassions description:

Examination	Description
5- Final exam: a- Written	 e.g. select (MCQs) & Supply (Short essay) questions, case study
b- Practical	e.g. Take history. Perform physical exam., write full clinical sheet.
c- Oral	e.g. How many sessions

6- List of references:

6.a. Basic materials:

- e.g. Department book:

6.1.2. department seminars

6.b. Essential books (text books):

6.b.1. Davidson of internal medicine

6.b.2 Kumar of medicine

6.c. Recommended books:

6.c.1. oxford of medicine

6.d. Periodicals, Web sites, etc:

6.d.1.http://www.medscape.com.

6.d.2.http://www.pubmed.com.

6.d.3.http://master.emedicine.com/maint/cme.asp.

6.d.4.http://www.science direct.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:

Course coordinator:

Date: 2013

الملحقات :

ملحق ١ : Academic standard of the program

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

ملحق 3: Benchmarks (المعاييرالمرجعية 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 Program-Courses ILOs Matrix

ملحق ١: Academic standard of the program

جامعة بنها
كلية الطب
قسم الطب الشرعي و السموم الأكلينيكية

وثيقة المعايير الأكاديمية المرجعية لبرنامج الماجستير

Academic Reference Standards (ARS) for Master Degree in Forensic Medicine and Clinical 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.

اعتماد مجلس القسم رقم (.....) ، بتاريخ .../...../.....

رئيس مجلس القسم

ملحق 2:المعايير القياسية العامة لبرامج الدراسات العليا

برامج الماجستير

١- موصفات الخريج

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

١-١ إجادة تطبيق أساسيات ومنهجيات البحث العلمى واستخدام أدواته المختلفة
١-٢ تطبيق المنهج التحليلى واستخدامه فى مجال التخصص
١-٣ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة فى مماسته المهنية
١-٤ إظهار وعيا بالمشاكل الجارية والرؤى الحديثة فى 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 فى سياقات مهنية مختلفة
١-٩ توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها
١-١٠ إظهار الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة فى ضوء المتغيرات العالمية والاقليمية
١-١١ التصرف بما يعكس الالتزام بالنزهة والمصداقية والالتزام بقواعد المهنة
١-١٢ 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 فى المجالات ذات العلاقة
٢-١-٢- التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة
٢-١-٣ التطورات العلمية فى مجال التخصص
٢-١-٤ المبادئ الاخلاقية والقانونية للممارسة المهنية فى مجال التخصص
٢-١-٥ مبادئ واساسيات الجودة فى الممارسة المهنية فى 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 فى 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
٢-٢-٥ تقييم المخاطر فى الممارسات المهنية فى مجال التخصص
٢-٢-٦ التخطيط لتطوير الاداء فى مجال التخصص
٢-٢-٧ اتخاذ القرارات المهنية فى 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 فى مجال التخصص

٢-٣-٢ كتابة وتقييم التقارير المهنية
٢-٣-٣ تقييم الطرق والادوات القائمة فى 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 الذاتى وتحديد احتياجاته التعليمية
٢-٤-٤ استخدام المصادر المختلفة لحصول على المعلومات والمعارف
٢-٤-٥ وضع قواعد ومؤشرات تقييم اداء الاخارين
٢-٤-٦ العمل فى فريق سياقات كهنية مختلفة
٢-٤-٧ ادارة الوقت بكفاءة
٢-٤-٨ التعلم الذاتى والمستمر

ملحق 3: Benchmarks (المعاييرالمرجعية الخارجية)

Department of Forensic Medicine, University of Dundee, Dundee, Scotland
Tel: Int. code: +44 (1382) 388020; UK code (01382) 388020
Fax: Int. code: +44 (1382) 388021; UK code (01382) 38802

Forensic Medicine programme Guide

What the course is

The Master of Forensic Medicine is a 1-year taught masters course designed primarily for overseas medical graduates. It may be suitable also for dental graduates, and for graduates in nursing or the biological sciences who have already completed a postgraduate degree such as an
MSc or a PhD. The philosophy of the programme is to foster the development of medico-legal expertise founded in current scientific knowledge and devoid of bias. The course addresses those aspects of forensic medicine and science which are most frequently the subject of expert testimony in the courts. The intention is to provide postgraduate students with core knowledge and intellectual skills in forensic medicine.
The course may be taken full-time over 12 months or part-time over 24 months. The course begins in mid-September, at the start of the university academic year. (The precise dates of the university academic year can be found on the university website). Students should plan on attending at the university during Freshers' Week, which is the week immediately before the
start of the first semester. The course follows the usual university semester dates with a Christmas vacation of four weeks and an Easter vacation of three weeks.
Teaching is through lectures, small group seminars in which the students are required to make Powerpoint presentations, and one-to-one case-based teaching on medico-legal autopsy cases.
All of the teaching materials, including the course and module guides, the lecture schedules, the lecture notes and assignments are provided on a computer-based system (Blackboard). Each student has personal desk space with computer, printer and internet access at all hours, seven days a week. There is also access to the Centre library at all hours, seven days a week.

COURSE AIMS AND OBJECTIVES

This one-year taught Masters course stands alone with no prerequisite course requirements other than a basic degree in medicine that is MB, ChB, or an equivalent qualification. The philosophy
of the programme is to foster the development of medico-legal expertise founded in current scientific knowledge and devoid of bias. The course addresses those aspects of forensic medicine and science which are most frequently the subject of expert testimony in the courts.
The intention is to provide postgraduate students with core knowledge and intellectual skills in forensic medicine.
After completing this course the successful candidate will:

1. Have a knowledge and understanding of forensic medicine principles, concepts and terminology
2. Have an understanding of related applications of forensic science
3. Be able to apply their knowledge and skills to accurately observe and document medicolegal findings
4. Be able to develop and critique medico-legal opinions based upon current literature

SYLLABUS

The MFM course comprises three modules. There are two compulsory taught modules, the one
in forensic medicine and the other in forensic science. The third module which makes up the course may be either a literature review dissertation or alternatively a research dissertation based upon a small research project.

The overall aim of the **forensic medicine module** is to provide an integrated working knowledge of the main subject areas within forensic medicine. The more detailed learning outcomes of the module and the listing of lecture topics are set out in an appendix to this document (Appendix 1). The forensic medicine module is delivered through lectures, some of which are discussion-based requiring student participation. The lecture material is illustrated with case examples. Each lecture is of two hours and there are 15 lectures in all. In addition there is case-based one-to-one teaching in the mortuary involving external examination of deceased and post mortem dissections. Students are required to complete records of learning on a minimum 50 external examinations and 50 post mortem dissections. The one-page record of learning sheets follow a similar format to those used by the Royal College of Pathologists for the training of forensic pathologists in the UK. Students are required to submit photocopies of these sheets as part of the course requirements. In addition there are four written essay type assessments which require the development of medico-legal opinions in fictionalised cases. There is available on Blackboard a detailed module guide for the forensic medicine taught module together with the lecture schedule, lecture notes, teaching notes on the medico-legal autopsy, the record of learning sheets, the four assignments and examples of medico-legal opinions. Students will find clear information regarding the scheduling of all assessments, including submission dates for coursework within the module guide. Feedback is provided to students on all assessed work and is scheduled into the lecture series (see Appendix). Students may request additional individual feedback from the module lecturer at any time by contacting the lecturer via email through Blackboard.

The overall aim of the **forensic science module** is to develop an understanding of applications
of forensic science related to the practice of forensic medicine. The more detailed learning outcomes of the module and the listing of seminar topics are set out in an appendix to this
document (Appendix 2). The forensic science module is delivered through small group seminars
in which students are required to make Powerpoint presentations on allocated topics detailed in
the module guide. These presentations form the basis of class discussions. Presentations are assessed in relation to content, focus and style. Seminar presentations and student participation

in the seminars count for 50% of the final mark for the forensic science module. Each seminar is of two hours and there are 10 seminars in all. Teaching is enhanced using computer-based fictional case scenarios and internet-linked material for individual study. There is available on
Blackboard a detailed module guide for the forensic science taught module together with the
seminar schedule, a listing of relevant references, student seminar tasks, example Powerpoint
presentations and advice on how to prepare such a presentation, fictional case scenarios and
internet links to sites with relevant teaching material. Assessment is by course work with seminar presentations and participation in the seminar counting for 50% of the final mark. There
are two written essay type assignments each counting for a further 25% of the module final
mark. Students will find clear information regarding the scheduling of all assessments, including
submission dates for coursework within the module guide. Feedback is provided to students on
all assessed work and is scheduled into the seminar series (see Appendix). Students may request
additional individual feedback from the module lecturer at any time by contacting the lecturer
via email through Blackboard.

**The third module is either a literature review dissertation or a research dissertation based
upon a short research project.** The majority of students undertake a literature review dissertation. The literature review module intends to provide the student with the ability to retrieve, critically review published literature and produce an accurate and balanced synthesis.

The subject matter of the review dissertation is agreed between the course organiser and the individual student within 4 weeks of the start of the MFM programme. The selection of the subject matter takes into account current issues in forensic medicine, the interests of the student,
and any particular medico-legal issues specific to the area of the world in which the student intends to practice. A first draft of a significant part of the review dissertation must be submitted in the first week of classes following the New Year holiday break. The alternative option, the research dissertation, aims to provide the necessary skills to plan, execute and write-up a
research project. There is one-to-one teaching on the project and developing a literature review around the subject matter of the project. There are limited opportunities to undertake research projects and students who wish to do so should raise the matter no later than the first few weeks
of the course, and preferably prior to entering the course. Feedback on literature review and research projects is provided orally to students on an individual basis within 2 weeks of submission of any written work. Students may request additional individual feedback

from the module lecturer at any time by contacting the lecturer via email through Blackboard

LEARNING OUTCOMES

By the end of the course, students should:

1. A detailed and critical knowledge and understanding of the science and art of forensic medicine
2. A critical awareness of current issues in forensic medicine
3. A critical understanding of the application of forensic science
4. The ability to interpret forensic medical evidence with objectivity and balance
5. The ability to retrieve, critically review published literature and produce an accurate and balanced synthesis
6. The ability to communicate with peers and more senior specialists orally and in writing
7. The ability to use a wide range of software to support and enhance the above
8. The ability to take responsibility for their own work and to exercise substantial autonomy and initiative in a learning environment

RECOMMENDED TEXTS

The prescribed course texts are listed in the forensic medicine and forensic science module guides. Students are advised that a sufficient number of these texts are available in the Centre library for the use of students. These texts may not be removed from the library and are available at all hours, seven days a week. Consequently students may choose not to purchase their own copies of these texts, some of which are expensive.

ATTENDANCE & PARTICIPATION

Attendance at every tutorial meeting and seminar (subject to illness or other good cause) is required if a student is to meet the standards of attendance and participation. If a student fails to attend tutorials or seminars, absence will be noted on the student record and so be a consideration at any stage where decisions about progress and future are being made and when references are being prepared. A student may be required to do additional work to compensate for absence (whatever the reason for the absence) and to demonstrate that there has been coverage of the materials and skills which that tutorial or seminar was designed to address. Such work must be completed. If a student has good reason for missing a class, eg illness, the student can self-certify absence for up to 5 days and should also inform the module organiser so that this can be noted. If an illness results in absence for more than 5 days, students must go to their doctor for confirmation of the illness and obtain a medical certificate signed by the GP. Medical certificates should be sent to the Centre office who will inform others as appropriate. Please note, however, that self-certification of illness is not permitted in relation to late submission of assessments.

ASSESSMENT

The individual coursework assignments provide formative assessment but also contribute towards a summative statement of achievement. Formative assessment is designed to

provide students with feedback on progress and inform development. Summative assessment provides a measure of achievement or failure made in respect of a student's performance in relation to the intended learning outcomes of the programme. The intended learning outcomes for the course as
a whole are set out above and for the individual modules are set out as appendices to this document (see Appendices1-3). Information on the types and number of assignments is given in
the section on the syllabus above, and an overall outline of the timetable of work and assessments is given in an appendix to this document (Appendix 5). Students will find clear information regarding the scheduling of all assessments, including submission dates for coursework within the individual module guides. This information is provided at the start of the
programme to enable students to plan and prepare effectively. Feedback is provided to students
on all assessed work and is scheduled into the lecture and seminar series in forensic medicine
and forensic science. Feedback on literature review and research projects is provided orally to
students on an individual basis within 2 weeks of submission of any written work. This feedback
is intended to promote learning and facilitate improvement. Students may request additional
individual feedback from any of the module lecturers at any time by contacting them via email
through Blackboard.
Assessment details are given in the individual module guides and have been outlined above. If,
for whatever reason, you do not complete the assignment(s) for a module you will be deemed to
have a nil mark for that element of the module though the circumstances of your non-completion
will be considered by the board of examiners.

APPENDIX 1: FORENSIC MEDICINE MODULE

Intended learning outcomes

Knowledge and Understanding:

· A detailed and critical knowledge and understanding of the science and art of forensic medicine

· A critical awareness of current issues in forensic medicine

Skills:

· The ability to apply their knowledge to accurately observe and document medico-legal findings

· The ability to interpret forensic medical evidence with objectivity and balance

· The ability to communicate with peers and more senior specialists orally and in writing

· The ability to concisely and cogently critique medico-legal opinions based upon current medical literature

Lecture topics:

1. Introduction, Wounds 1
2. Wounds 2
3. Post Mortem Changes and Time of Death
4. Gunshot Wounds
5. Alcohol and Drugs
6. Assignment 1 Discussion
7. Death and Related Matters: Certification, Disposal & Organ Transplantation
8. Death Investigation
9. Assignment 2 Discussion
10. Bodies recovered from Fire and Water
11. Asphyxia
12. Personality Profiling of Assailants
13. Sexual Offences and Child Abuse
14. Assignment 3 Discussion
15. Assignment 4 Discussion

APPENDIX 2: FORENSIC SCIENCE MODULE

Intended learning outcomes

Knowledge and Understanding:

· Have an understanding of the principles and practice of physical evidence collection and preservation

· Have a critical understanding of the principles underpinning the various class and individualising tests performed by the laboratory, for each type of physical evidence

Skills:

· The ability to retrieve, critically review published literature and produce an accurate and balanced synthesis

· The ability to communicate with peers and more senior specialists orally and in writing

· The ability to use a wide range of software to support and enhance the above

· The ability to take responsibility for own work and to exercise substantial autonomy and initiative in a learning environment

Seminar topics:

1. Laboratory Instruments and Techniques in Forensic Science
2. Physical Match and Fingerprints
3. Fingerprints
4. Fibres & Hairs
5. Blood spatter, Serology & DNA
6. Drugs and Document Examination
7. Firearms
8. Paint and Road Traffic Accidents
9. Statistical Analysis

APPENDIX 3: LITERATURE REVIEW DISSERTATION OR RESEARCH

DISSERTATION

(a) Literature review dissertation

Intended learning outcomes

Knowledge and Understanding:

· critical awareness of current issues in forensic medicine

Skills:

· The ability to retrieve, critically review published literature and produce an accurate and
balanced synthesis

·

· The ability to communicate with peers and more senior specialists orally and in writing

· The ability to use a wide range of software to support and enhance the above

· The ability to take responsibility for own work and to exercise substantial autonomy and
initiative in a learning environment

(b) Research dissertation

Intended learning outcomes

By the end of the module, students should have:

· Knowledge of safety procedures as they apply within a scientific laboratory

· An attitude which values honesty, frankness, and integrity in scientific research.

· The ability to plan and execute a significant project of research or investigation

· The ability to retrieve, critically review published literature and produce an accurate and
balanced synthesis

· The ability to take responsibility for own work and to exercise substantial autonomy and
initiative in a project

APPENDIX 4: UNIVERSITY OF DUNDEE SENATUS ACADEMICUS REGULATIONS GOVERNING PLAGIARISM AND ACADEMIC DISHONESTY

{Note: these Regulations apply to all undergraduate and postgraduate degrees, diplomas and
certificates}

· 1. The University's degrees and other academic awards are granted in recognition of a candidate's personal achievement.

· 2. Any action on the part of a candidate which involves plagiarism (defined as the unacknowledged use of another's work as if it were one's own exemplified by copying from a source without acknowledgement of its origin) or other form of academic dishonesty, in work which may be assessed as part of the requirements for an academic award, will be regarded as a serious offence.

· 3. Where a substantive case of academic dishonesty or plagiarism is detected by an examiner, a written or oral report shall be made to the Board of Examiners(1) concerned, along with one of the following recommendations:

1. that the examiner is satisfied that the matter should be noted but requires no

further action by the Board(1) because it involves no more than a single lapse or a very few minor lapses which have been taken into account in the examiner's assessment of the work; or

2. that the nature of the academic dishonesty is such that in the examiner's opinion it is appropriate to reduce the candidate's mark by a specified amount to reflect the examiner's assessment of the extent of the cheating; or

3. that the nature of the academic dishonesty, and/or its extent, is so significant that the examiner is unable to penalise the work adequately by a reduction in marks and that the Board of Examiners(1) should consider it as a serious case of cheating.

· 4(1) In the case of a recommendation from an examiner in terms of Regulation 3(2) the Board of Examiners(1) has the discretion to adjust the marks and results up to the point where the academic rating for the piece of work in question is reduced to zero with whatever consequences would normally follow from such performance, including loss of class in the case of honours examinations, or failure in the case of other examinations.

· 4(2) A Board of Examiners(1) has no power to make a greater adjustment to marks by way of penalty for what it regards as a more serious and substantial case of academic dishonesty. Where a Board of Examiners(1) believes the extent of the dishonesty in terms of Regulation 3(3) to be such that sanction over and above the disallowance of work is appropriate, as detailed a report as possible of the circumstances of the offence should be sent to the Academic Secretary who will arrange for it to be considered along with his recommendation concerning the subsequent action which might be taken by the University Committee on Academic Dishonesty. In such a case, any decision by the Board of Examiners(1) concerning that particular student shall be suspended pending the decision of the Committee.

· 4(3) The decision of the Committee on Academic Dishonesty shall be final except in those cases where the Committee believes refusal to award a degree or other qualification or exclusion from the University is appropriate. In such cases the Committee shall make a recommendation to the Senate.

November 2000

Footnotes

(1) or the Director of the Centre in cases where academic dishonesty or plagiarism is detected in coursework undertaken during the academic year. This is to ensure that matters may be dealt with expeditiously in the interests of the students concerned rather than having to wait for the annual meeting of the Board of Examiners in June.

(2) Any such decision of the Senatus is subject to the provision of Statute 9(5)(b).

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
- 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
- strengthen the teaching- research nexus in forensic medical education
- 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;
6. 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;
5. 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:

http://www.med.monash.edu.au/vifm/

ملحق 4: مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية العامة

- **مواصفات الخريج:**

مواصفات الخريج بالمعايير الأكاديمية للبرنامج	مواصفات الخريج بالمعايير القياسية العامة لبرامج الدراسات العليا (درجة الماجستير)
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.	١.١. 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.	١.٢. تطبيق المنهج التحليلى واستخدامه فى مجال التخصص
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.	١.٣. تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة فى مماسته المهنية
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.	١.٤. إظهار وعيا بالمشاكل الجارية والرؤى الحديثة فى مجال التخصص
1.5.Identify and share to solve health problems in forensic medicine and clinical toxicology.	١.٥. 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.	١.٦. 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.	**١.٧. التواصل بفاعلية والقدرة على قيادة فرق العمل**
1.8.Acquire decision making capabilities in different situations related to forensic medicine and clinical toxicology.	**١.٨. اتخاذ القرار فى 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 cost-effective health care, health economics, and resource allocations	**١.٩. توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها**
1.10.Be aware of public health and health policy issues and share in system-based improvement of health care.	**١.١٠. إظهار الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة فى ضوء المتغيرات العالمية والاقليمية**
1.11Show appropriate attitudes and professionalism.	**١.١١. 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 stages in forensic medicine and clinical toxicology.	**١.١٢. تنمية ذاته أكاديميا ومهنيا وقادرا على التعلم المستمر**

أ ـ المعرفة والفهم:

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الماجستير)
By the end of Master program, the candidate s 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.	**بأنتهاء دراسة برنامج الماجيستير يجب ان يكون الخريج على فهم ودراية بكل من :** **2-١-١ النظريات والاساسيات المتعلقة بمجال التعلم وكذا فى 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 فى مجال التخصص**
2.1.4.Ethical principles and medico-legal aspects of practice of clinical toxicology and forensic medicine as well as medical responsibility.	**٢-١-٤ المبادئ الاخلاقية والقانونية للممارسة المهنية فى مجال التخصص**

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 research.	٢-١-٦ اساسيات واخلاقيات البحث العلمى

ب - القدرات الذهنية :

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الماجستير)
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.	بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على : 2-٢-١ تحليل وتقيم المعلومات فى 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.	٢-٢-٤ 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 فى الممارسات المهنية فى مجال التخصص
2.2.6.Planning for improvement of professional	٢-٢-٦ التخطيط لتطوير الاداء فى مجال

performance in the field of forensic medicine and clinical toxicology.	التخصص
2.2.7.Decision making skills.	٢-٢-٧ اتخاذ القرارات المهنية فى 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 acce wings 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 فى 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 فى 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: 2.4.1.Interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.	بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على : 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.	**٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية**
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 electronic format.	**٢-٤-٤ استخدام المصادر المختلفة لحصول على المعلومات والمعارف**
2.4.5.Incorporate formative evaluation feedback into daily practice.	**٢-٤-٥ وضع قواعد ومؤشرات تقييم اداء الاخارين**
2.4.6.Team work/leadership in different professional tasks.	**٢-٤-٦ العمل فى 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 البرنامج	المعايير الأكاديمية للبرنامج (مواصفات الخريج):
1.4.	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.
1.1.	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 and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care in forensic medicine and clinical toxicology.
1.2.	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.
1.1.	1.5.Identify and share to solve health problems in forensic medicine and clinical toxicology.
1.3.	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
1.5. **1.9.**	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.
1.6.	1.8.Acquire decision making capabilities in different situations related to forensic 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, practice of cost-effective health care, health economics, and resource allocations
1.7.	1.10.Be aware of public health and health policy issues and share in system-based improvement of health care.
1.8.	1.11Show appropriate attitudes and professionalism.
1.3.	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.

المعايير الأكاديمية للبرنامج	نواتج تعلم البرنامج										
	المعرفه و الفهم										
	2.a.1.	2.a.2.	2.a.3	2.a.4	2.a.5	2.a.6	2.a.7	2.a.8	2.a.9	2.a.10	
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.

نواتج تعلم البرنامج										المعايير الأكاديمية للبرنامج
Intellectual skills										المهارات الذهنية
2.b.8	2.b.7	2.b.6	2.b.5	2.b.4	2.b.3	2.b.2.	2.b.1.			
							√			***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.

نواتج تعلم البرنامج											المعايير الأكاديمية للبرنامج
Practical/Professional skills											المهارات المهنية
2.c.7	2.c.6	2.c.5	2.c.4	2.c.3	2.c.2.	2.c.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.
						√		√	√	√		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.

نواتج تعلم البرنامج												المعايير الأكاديمية للبرنامج
General and transferable 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.	
						√	√					**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 (6) مصفوفة المعارف والمهارات للبرنامج الدراسى

Knowledge & Understanding المعارف										ILOs / Courses & codes	
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		
■								■		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

Intellectual Skills مهارات ذهنية								ILOs / Courses & codes	
2.b.8.	2.b.7	2.b.6	2.b.5	2.b.4	2.b.3	2.b.2	2.b.1		
						■	■	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

Practical & Clinical Skills مهارات عملية و مهنية								ILOs / Courses & codes	
2.c.1	2.c.2	2.c.3	2.c.4	2.c.5	2.c.6	2.c.7.			
								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

General and transferable مهارات عامة								ILOs / Courses & codes	
2.d.1	2.d.2	2.d.3	2.d.4	2.d.5	2.d.6	2.d.7.	2.d.8.		
■								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

أستاذ المادة
التوقيع

رئيس القسم
التوقيع :