

**Template for  
Course Specification**

**Faculty :** Mansoura Faculty of Medicine  
**Department :** Forensic Medicine and Clinical Toxicology

**Course Specification**

Programme(s) on which the course is given : M.B.B.ch  
Department offering the course : Forensic Medicine and Clinical Toxicology  
Academic year / level : 2015/2016, 4<sup>th</sup> year  
Date of specification approval : 26/10/2015

**A- Basic information**

Title: Forensic Medicine and Clinical Toxicology Code: FNST  
Lecture: 80 h Tutorial: Practical 64 h Total: 144 h

**B- Professional Information****1 - Overall Aims of Course is to:**

- 1) Provide basic knowledge, skills and attitude of forensic medicine for general practitioners.
- 2) Provide basic knowledge, skills and attitude to diagnose-and manage intoxicated patients.
- 3) Acquire basics of ethics, medicolegal aspects of health problems, malpractice and common medical errors.

**2 – Intended Learning Outcomes of Course (ILOs)****a- Knowledge and Understanding**

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

- A1 Discuss different parameters used in identifications of collection of bone, living or dead persons for medico legal aspects
- A2 Identify Thanatology and explain medicolegal importance of postmortem changes.
- A3 Describe different types of wounds and explain their medicolegal aspects.
- A4 Recognize the different medico-legal (ML) aspects of head injuries.
- A5 Identify basics of firearm weapons.
- A6 Discuss medico-legal (ML) aspects of firearm injuries.
- A7 Indicate the medicolegal importance of disputed paternity and blood grouping.
- A8 Classify thermal injuries and identify discuss medico-legal (ML) aspects of thermal injuries.
- A9 Classify different types of asphyxia and identify the medicolegal aspects of different types of violent asphyxia.
- A10 Identify the different types of sexual offences.
- A11 Indicate medicolegal importance of virginity.
- A12 Define different types of child abuse and discuss the medicolegal aspects of physical child abuse.
- A13 Explain medicolegal aspects of medical ethics, consents and legal aspects of malpractice.
- A14 Identify medicolegal aspects of pregnancy, delivery and abortion.
- A15 List classification of poisons and factors affecting their action.
- A16 Identify drug dependence and its biological, social and psychological basis.
- A17 Discuss dependence of common illicit substances.

**b- Intellectual Skills**

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

- B1 Determine causes of death of different injuries and toxins.
- B2 Determine postmortem interval in different criminal incidents.
- B3 Analyze case scenario of forensic medicine cases.

- B4 Appraise cases of malpractice and ethical aspects of the medical practice.  
 B5 Integrate results of history, physical and laboratory investigations into a meaningful diagnostic formulation.  
 B6 Construct an appropriate management plan of acute or chronic intoxicated patient.  
 B7 Assess mental status for intoxicated patients.

### c- Professional and Practical Skills

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

- C1 Examine collection of bones to identify its sex, age and race.  
 C2 Estimate age by X ray examination.  
 C3 Identify characters of different types of wounds.  
 C4 Demonstrate characters different types of head injuries.  
 C5 Recognize different parts of firearm weapons.  
 C6 Demonstrate different types firearm injuries.  
 C7 Predict the causative instruments, survival period and causes of death of different types of injuries.  
 C8 Demonstrate different toxic capsules, seeds and roots and explain their medicolegal aspects.  
 C9 Predict the intrauterine fetal ages.  
 C10 Assess uteri of illegal abortion and interpret the cause of death and survival periods after abortion.  
 C11 Construct a proper primary wound report.  
 C12 Elicit findings of medico-legal importance through demonstration of forensic case photograph.  
 C13 Demonstrate a thin layer chromatography plate and calculate rate of flow for the unknown substance  
 C14 Insert a nasogastric intubation (skill lab).  
 C15 Diagnose and treat different virtual toxic cases.

### d- General and Transferable Skills

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

- D1 Adopt principles of life-long learning in medical professionalism.  
 D2 Use information and communication technology effectively.  
 D3 Perform a good power point presentation.

### E- Professional attitude:

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

- E.1. Work effectively in a team with colleges and other health care professions.  
 E.2. Be aware of the National Code of Ethics issued by the Egyptian Medical Syndicate.

## 3 – Contents

### I- Forensic Medicine

TOPIC	No. OF HOURS		
	TOTAL	LECTURES	PRACTICAL
1. Medicolegal aspects of Identification of collection of bones, dead persons and living persons.	12	4	8
2. Thanatology and Medicolegal aspects of Postmortem changes	6	6	-
3. Medicolegal aspects of wounds and Report.	12	6	6
4. Medicolegal aspects of head injuries	10	4	6
5. Medicolegal aspects of firearm injuries.	10	4	6
7. Medicolegal aspects of thermal injuries	3	3	-

TOPIC	No. OF HOURS		
	TOTAL	LECTURES	PRACTICAL
8. Medicolegal aspects of disputed paternity	1	1	-
9. Medicolegal aspects of Violent asphyxia	4	4	-
10. Medicolegal aspects of pregnancy, abortion, and delivery. - Diagnosis of abortion in living and dead females.	4	2	2
11. Medicolegal aspects of child abuse & SIDS	2	2	-
12. Medicolegal aspects of Sexual offenses	2	2	-
13. Medicolegal aspects of Medical Ethics Consent and Malpractice	2	2	-
14. Forensic photographs	2		2
15. Forensic cases discussion	2		2
<b>TOTAL</b>	<b>72</b>	<b>40</b>	<b>32</b>

## II. Clinical Toxicology

TOPIC	No. OF HOURS		
	TOTAL	LECTURES	PRACTICAL
1.General toxicology	14	4	10
2. Corrosives and carbolic acid	3	3	
3. Irritant poisons	6	4	2
4. Pesticides	6	4	2
5. Analgesics Poisoning	2	2	
6- CNS depressant & Carbamazepines Poisoning	2	2	
7. Atropine Poisoning	2	1	1
8. Digitalis Poisoning	3	2	1
9. Cannabis Poisoning	2	2	
10. CO- Poisoning	1	1	
11.Theophylline Poisoning	1	1	
11. Opium Alkaloids	2	1	1
12Ethanol & Methanol Poisoning			
12. Hydrocarbon Poisoning	1	1	
13. Cocaine	2	2	
14- Drug dependence	6	4	2
15. Food poisoning & Botulism	2	2	
16. Animal poisons	4	2	2
17. Toxic Seeds & capsules	4		4
18. Thin Layer Chromatography	4		4
19. Toxic cases	2		2
<b>TOTAL</b>	<b>72</b>	<b>40</b>	<b>32</b>

### Matrix of ILOs

	A																	B							C															D			E					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	1	2	3	4	5	6	7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1	2	3	1	2				
Identification	√																√		√						√	√					√											√	√	√	√			
Death		√															√	√	√												√												√	√	√	√		
Wounds			√														√	√	√								√				√					√							√	√	√	√		
Head injuries				√													√		√									√			√												√	√	√	√		
Firearm injuries					√	√											√	√	√											√	√	√											√	√	√	√		
Disputed paternity							√										√		√												√											√	√	√	√			
Thermal injuries								√									√	√	√												√											√	√	√	√			
Violent asphyxia									√								√	√	√												√											√	√	√	√			
Sexual offenses										√	√						√		√												√											√	√	√	√			
Child abuse.												√					√		√												√											√	√	√	√			
Medical ethics													√				√		√	√		√																			√	√	√	√		√		
Pregnancy, abortion & delivery.															√		√	√	√					√						√		√	√								√	√	√	√				
Forensic photographs																																				√												
Forensic cases discussion																	√														√																	



#### 4 – Teaching and Learning Methods

<b>Method</b>	<b>Tools</b>
4.1.Lectures	Power point presentations.
4.2.Practical demonstrations	Forensic Photography cases <ul style="list-style-type: none"> <li>- Museum specimens</li> <li>- Skill laboratory facilities</li> <li>- Computer Labs</li> <li>- Power point presentations and Photographs.</li> <li>- Radiographs</li> <li>- TLC Plates.</li> </ul>
4.3.Clinical demonstrations in Toxicology Unit in Mansoura Emergency Hospital	- Toxicology unit group discussion and equipment
4.4.Self learning	Self learning through giving them certain topics to search, collect data and present the in front of senior staff

#### 5- Student Assessment Methods :

##### Weighting of Assessments

<b>Examination</b>	<b>Description</b>	<b>Marks</b>	<b>Total</b>	<b>%</b>
<b>Mid-term examination</b>	MCQs	25	40	20
	Virtual lab.	5		
	Log book	5		
	Student's activities (presentation)	5		
<b>Final written examination</b> Short essay questions, problem solving and MCQ	Written Toxicology Paper	35	100	50
	MCQ Toxicology Paper	15		
	Written Forensic Paper	35		
	MCQ Forensic Paper	15		
<b>Objective Structured Practical exam</b>	Final Practical Exam (Museum specimens, TLC)	25	40	20
	Skill lab Exam	5		
	Reports for wounds	5		
	Forensic photography	5		
<b>Structured oral exam</b>	Forensic Medicine Clinical Toxicology	20	20	10
<b>Total</b>		200	200	100

##### Assessment Schedule:

<b>Method of assessment</b>	<b>Description</b>
<b>MCQs</b>	At the end of the round
<b>Virtual lab.</b>	At the end of the round
<b>Log book</b>	At the end of the round
<b>Student's activities</b>	The student will present the topic in front of senior staff at the end of the round
<b>Final written examination</b>	At the end of the academic year
<b>Final Practical Exam (Museum specimens, TLC)</b>	At the end of the academic year
<b>Skill lab Exam</b>	At the end of the round
<b>Reports for wounds</b>	At the end of the academic year
<b>Structured oral exam</b>	At the end of the academic year



## **6 – List of References**

### **Basic:**

1. Department books
2. Museum Atlas

### **Suggested Readings:**

#### **(1) Forensic Medicine:**

- Sauko, P. and Knight, B., (2004): Knight's Forensic Pathology, 3rd Edition. CRC Press.
- Payne-James, J., Mc Govern, C., Jones, R., Karch, S. and Manlove, J. (2011): Simpson's Forensic Medicine, 13th Edition: Irish Version. CRC Press .
- Biswas, G. (2012): Review of Forensic Medicine and Toxicology. 2nd edition, Jaypee Brothers Medical Publishers Ltd.

#### **(2) Clinical toxicology:**

- Olson, K.R. (2011): Poisoning & Drug Overdose. 6th Edition. McGraw-Hill Education
- Haddad and Winchester's Clinical Management of Poisoning and Drug Overdose (2007): Michael Shannon, Stephen W. Borron, Michael Burns. 4th ed., Library of Congress Cataloging-in-Publication Data by Saunders, an imprint of Elsevier Inc

## **7 – Facilities Required for Teaching and Learning**

1. Department lectures halls (3 halls ) containing audiovisual facilities (data show & Computers)
3. Toxicology Unit in Mansoura Emergency Hospital.
4. Forensic Museum Specimens
5. Skills Laboratory with equipment for nasogastric intubation.
6. Computer Lab for virtual cases.

\* Students of each group are divided into 3 subgroups each receives its practical lectures because of their large number which is not compatible with the capacity of our museum and laboratory.

**Course Coordinator :** Lecturer: Hend Abo El-Atta

**Head of Department :** Prof. Dr.: Sahar abd El Aziz El Dakroory



