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

Course Specification

Course title: Forensic Medicine and Clinical Toxicology.

Code: MED 0710

Academic Year (2010 – 2011)

- **Department offering the course:** Forensic Medicine and Clinical Toxicology.
- **Academic year of M.B. & B.Ch. program:** 4th year (2010 – 2011).
- **Date of specification approval:**
  - Department council No. **(200)** , date **25/7/2010.**
  - Faculty council No , date .

A) Basic Information:

- **Allocated marks:** 200 marks.
- **Course duration:** 30 weeks of teaching.
- **Teaching hours:** 4.8 hours / week = 144 hrs total teaching hours.

	Hours / week	Total hours
1- Lectures	2 hrs/week for 30 weeks	60 hrs
2- Small group teaching / tutorials	3 hrs/week for 7 weeks	21 hrs
3- Practical	9 hrs/week for 7 weeks	63 hrs
Total	30 weeks	144 hrs

B) Professional Information:

1- Overall Aim of the Course:

1.1. To provide basic knowledge of different medicolegal aspects of medical practice.

1.2. To provide basic knowledge of medical ethics and malpractice.

1.3. To provide ability to diagnose and manage intoxicated patients.

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

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

2.1.1. ***Define*** different general forensic and toxicological terminology, death and its phases, brain death criteria, its ethics and implications.

2.1.2. ***Recognize*** differences between the cause, mechanism, mode and manner of death, list medicolegal deaths and the objective of their investigation and their handling.

2.1.3. ***Describe*** postmortem changes and their importance in determining the time of death.

2.1.4. ***Describe*** points of unknown body identification whether living or dead, the necessity of identification and ages of medicolegal importance in Egypt and their estimation.

2.1.5. ***Describe*** methods of stains identification (blood, seminal and salivary stains), hairs, teeth, scientific basis of DNA typing and their medicolegal importance.

2.1.6. ***Explain*** causes and mechanisms of sudden unexpected natural death, the methods used in their diagnosis and their medicolegal importance.

2.1.7. ***Define*** different types of wounds (legal, etiological and regional: head, neck, chest and abdominal injuries), the wound patterns, and medicolegal importance and mechanisms of death from wounds.

2.1.8. ***Explain*** the circumstances of intoxication, toxic doses, toxicokinetics, clinical picture, differential diagnosis of toxicity of different drugs and toxic substances and the general management of poisoned patient.

2.2. Practical and Clinical Skills

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

2.2.1. ***Diagnose*** death by different clinical and investigatory methods.

2.2.2. ***Write*** death certificate according to the international form of medical certificate of the cause of death.

2.2.3. ***Identify*** living, dead individuals, sex and ages from bones and by using the X rays films.

2.2.4. ***Identify*** different types of injuries and signs of different causes of violent deaths.

2.2.5. ***Examine*** the assaulted persons and their wounds photographs.

2.2.6. ***Write*** a primary toxicological report.

2.2.7. ***Write*** a proper primary wound report.

2.2.8. ***Perform*** proper physical examination of the intoxicated patients.

2.2.9. ***Diagnose*** different cases of poisonings and intoxications.

2.2.10. ***Establish*** strategy for management of the intoxicated patients.

2.3. Professional Attitude and Behavioral kills:

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

2.3.1. ***Demonstrate*** Respect for patients' rights and involve them and /or their caretakers in management decisions.

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

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

2.3.4. ***Reflect*** critically on their own performance and that of others, to recognize personal limitations regarding skills and knowledge to refer patients to appropriate health facility at the appropriate stage.

2.4. Communication skills:

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

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

2.4.2. ***Establish*** good relations with other health care professionals regardless their degrees or rank.

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

2.4.4. ***Cope up*** with difficult situations as breaking news.

2.4.5. ***Respect*** patients and their relatives, superiors, colleagues and all members of the health profession.

2.5. Intellectual Skills:

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

2.5.1***. Recognize*** common ethical dilemmas and suggest a proper solution.

2.5.2. ***Analyze*** case scenario of clinical forensic medicine and recognize their medicolegal aspects.

2.5.3. ***Analyze*** different problems of malpractices.

2.5.4. ***Analyze*** case scenario of intoxicated patient and formulate treatment plan.

2.6. General and transferable Skills:

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

2.6.1. ***Recognize*** the legal and moral aspects of medical practice.

2.6.2. ***Learn*** how to prevent intoxications especially household induced.

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

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

2.6.5. ***Retrieve***, manage, and manipulate information by all means, including electronic means.

2.6.6. ***Present*** information clearly in written, electronic and oral forms.

2.6.7. ***Establish*** effective interpersonal relationship to Communicate ideas and arguments.

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
I- FORENSIC MEDICINE					
1- General forensic and toxicologic terminology (forensic medicine, forensic science, autopsy, evidence, scene, toxicology, poison, poisoning.- etc.)	1	1	1	3	2%
2- Death (Definition, Diagnosis, The concept of brain death, mechanism, mode and manner of death, Death Certificate, Medicolegal deaths and their handling, time of death and postmortem changes.**)**	2		2	4	2.7%

3-Identification (necessity of identification, identification of living and dead, bones, physical evidence**).**	2	1	6	9	6.2%
4- Unexpected and sudden natural death	1		1	2	1.3%
5- Wounds (definition, doctor' duty in wounding cases classification mechanisms of death from wounds.	2	1	5	8	5.5%
6- Regional injuries: (head, neck, chest and abdominal**)**	2	1	5	8	5.5%
7- Firearm Injuries: (types of firearms and ammunition, characters, range and direction firing, mechanisms and manner death, doctor' duty in firearm injuries**)**	2	1	4	7	4.8%
8- Thermal Injuries: (heat, cold and electricity**)**	2		2	4	2.7%
9- Transportation Injuries:	2	1	1	4	2.7%
10- Violent Asphyxia: (classical signs, types immersion and drowning)	4	1	2	7	4.8%
11- Deaths associated with surgery and anesthesia	1			1	0.6%
12- Sexual Offences: (rape, indecent assault and homosexual offences).	2		4	6	4.1%

13- Pregnancy, delivery and abortion	2	1	3	6	4.1%
14- Death and injury in infancy:	3		2	5	3.4%
15- Medical Ethics	4		2	6	4.1%
16- Malpractice	1	1	2	4	2.7%
II- TOXICOLOGY					
1- General toxicology (classification of poisons, fatal and toxic dose, factors modifying poison action, doctor' duty in poisoning, diagnosis of poisoning).	4	1	2	7	4.8%
2- General management of poisoned patient.	1	1	2	4	2.7%
3- Medicinal poisons (analgesics, sedative-hypnotic**,** anticholinergics, antidepressants, cardiac glycosides, B-Mockers **and others.**	6	2	4	12	8.3%
4- Corrosives: (acids and alkalies**)**	1	1	1	3	2%
5- Heavy metals: lead, arsenic, mercury, iron **and others.**	2	1	1	4	2.7%
6- Pesticides: (insecticides**,** rodenticides **and others).**	2	1	2	5	3.4%
7- Gaseous poisoning: (suffocating gases**,** irritant gases, & asphyxiant**).**	2	1		3	2%

8- Food poisoning	1	1		2	1.3%
9- Animal poisoning	1			1	0.6%
10- Alcohols and drugs of dependence and abuse: (Medicolegal aspects of dependence, ethanol, methanol, ethylene glycole, opioids, cocaine and amphetamine, hallucinogens, nicotine).	6	2	6	14	9.7%
11- Miscellaneous poisons.	1	1	2	4	2.7%
TOTAL	**60**	**21**	**63**	**144**	**100**%

4- Teaching and learning methods:

METHODS USED:

1. Modified lectures.
2. Small group discussions: museum specimens, demonstration (slides photographs and Video films), models, case study.
3. Problem solving.
4. Self-learning.
5. Clinical visit to poison control center
6. Practical classes

TEACHING PLAIN:

Lectures: 60 lectures

Tutorials: 21 tutorials

Practical classes: 63 practical classes

Time plain:

Item	Time schedule	Teaching hours	Total hours
Lectures	**2** Times/week (each time **1** hour)	**60 hours**	**41.6%**
Practical classes	**63** Hours/ 7 week	**63 hours**	**43.7%**
Tutorials (small groups)	**21** Hours/ 7 week	**21 hours**	**14.5%**
Total		**144 hours**	**100%**

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	To assess knowledge acquisition, including MCQs and problem solving
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
1- Assessment 1 (***mid-round***)	Week ------5
2- Assessment 2 (***end-round***)	Week ------7
3- Assessment 3 (***Final exam***)	At end of year (week ---------30)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- ***Mid-round exam***	15	7.5%
2- ***End-round exam***	25	12.5%
3- ***Final exam:***		
a- Written	100	50%
b- Practical	30	15%
c- Oral	30	15%
4- ***Assignments & other activities***	----------	------
Total	**200**	100%

- **The minimum passing score is 120 marks, provided that at least 30 marks are obtained in the final written examination.**
- **Passing grades are:**
  1. Excellent: > 85%
  2. Very good: 75-85%
  3. Good: 65-75%
  4. Fair: 60-65%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- ***Mid-round exam***	Quiz (MCQs, complete, true & false …….)
2- ***End-round exam***	Case study, MCQs and complete
3- ***Final exam:***	
a- Written	Short assay, select (MCQs), complete & case study.
b- Practical	Spots identification & write a report.
c- Oral	Two sessions (forensic and toxicology)
4- ***Assignments & other activities***	Round assignments, projects, practical books, self learning projects and researches….. etc

6- List of references:

6.1- Basic materials:

Department books:

1- Forensic medicine &Toxicology

2. Museum and Practical books

6.2- Essential books (text books):

1- Forensic pathology: Bernard Knight.

2. Principles of Toxicology: Karen E stine

6.3- Recommended books:

1. Medical toxicology: Richard C dart
2. Emergency Toxicology: Peter viccellio.
3. Forensic pathology: Vincent J DiMaio

6.4- Periodicals, Web sites, etc:

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

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lectures halls: 3
- Department lectures halls: 2
- Museum hall: 6TH floor
- Department lab.
- Poison control unit (PCU).

Course coordinator: **Prof Dr. Ola Gaber Haggag**
Head of Department: **Prof Dr. Ola Gaber Haggag**
Date: **2010 – 2011.**

TEMPLATE FOR COURSE REPORTS

Benha University
Faculty of Medicine
Department of ……..

Course Report
Academic Year 2009 – 2010

A-Basic Information:

1- Course title and code:

2- _____ year of M.B. & B.Ch. Program

3- Allocated marks

4- No. of hours:

Similar to Course Specification

5- Teaching staff:

a- Number of teaching staff categories (Professors, Assistant professors, Lecturers and assistant staff (Assistant lectures and demonstrators).

b- Student / staff / course Ratio (Academic year or round for clinical departments)

6- Course coordinator

7- External evaluator

B- Statistical Information:

Number of students starting the course		
Number of students completing the course		Number (% of starting No.)
Number of fail students		Number (% of completing)
Number of pass students		Number (% of completing)
Grades	Excellent	Number (% of pass)
	Very good	Number (% of pass)
	Good	Number (% of pass)
	Fair	Number (% of pass)

C- Professional Information:

1- Course topics taught:

A) Lectures:

Topics	Specified hours	Actual hours	Lecturer(s)
1-			
2-			
Etc			

- Percent of specified topics actually covered (> 90% or 70 – 90% or < 70%)
- Specified topics that were not taught and justification (Reasons in details):
  -
  -
- Taught topics other than those specified & justification (Reasons in details):
  -
  -

B) Practical:

Topics	Specified hours	Actual hours	Lecturer(s)
1-			
2-			
Etc			

- Percent of specified topics actually covered (> 90% or 70 – 90% or < 70%)
- Specified topics that were not taught and justification (Reasons in details):
  -
  -
- Taught topics other than those specified & justification (Reasons in details):
  -
  -

C) Tutorials / small group discussions:

Topics	Specified hours	Actual hours	Lecturer(s)
1-			
2-			
Etc			

- Percent of specified topics actually covered (> 90% or 70 – 90% or < 70%)
- Specified topics that were not taught and justification (Reasons in details):

-

- Taught topics other than those specified & justification (Reasons in details):
  -

2- Teaching and learning methods:

Method specified	Applied or not	Comments
1- lectures		
2- Practical		
3- Tutorials		
4- etc		

- Methods that were not used and justify:
  -
- Methods used other than those specified and justify:
  -

3- Student assessment:

a- Methods of assessment

Method specified	Total Marks (% of Total Marks)	
	Specified	Actual
1- Written examination		
2- Oral examination		
3- Practical		
4- etc		
Total		

- Justify any deviation from specified

b- State the rules applied for the selection of the examination committee.
State the names of the members of the examination committee.

c- State the involvement of the external evaluator in:
- The match between the examination and the topics taught.
- The existence of grading criteria in examination sheets
- The allocation and distribution of marks and weighting
- Effectiveness of the overall assessments in measuring the achievement of the intended learning outcomes (ILOs).

4- Facilities and teaching materials:

Facilities & Teaching Materials	Totally Adequate	Partially Adequate	Inadequate	Impact on Delivery of the course Or achieving ILOs
1- Lecture halls				
2- A-V aids				
3- Laboratories				
4- Equipments				
5- Specimens				
6- Library				

7- etc				

Identify inadequacies, together with any problems in the delivery of the course or achieving the ILOs.

5- Administration constraints:

State any administrative constraints related to teaching and learning e.g. lack of:

- Some facilities or funds
- Teaching aids
- Site visits
- Qualified personnel for laboratory and administration
- Management problems or regulations, which impeded the delivery of the course and the achievement of the ILOs.

6- Results of course evaluation by students:

- Method used e.g. Questionnaires, interviews, focus group etc.
- State the main points e.g. teaching, facilities, assessments…..
- Achievement of Course's ILOs.
- Response to any criticisms by the faculty members delivering the course, together with their proposals for dealing with those issues.

7- External evaluator's comments:

- State the issues raised by the external evaluator
- Responses from the faculty members delivering the course, together with their proposals for dealing with those issues.

8- Course enhancement:

a- Previous Action Plan

Specified Action	Status Completed or Not	Reasons for non-completion
1-		
2-		

Write the issues not handled from those raised in the previous report and the reasons for overlooking such issues.

b- Action plan for program enhancement over the next academic year (200X – 200Y):

Action Required	Completion date Or Time Schedule	Person Responsible
1-		
2-		

- **Add actions not completed in the previous action plan.**
- **The action plan is fundamental to the success of the quality system.**

- **It appears at the end of the report, because it is the result of all of prior analysis.**
- **Enhancement can only take place if issues are identified and then acted upon and resolved.**
- **The action plan identifies the issues, prioritizes them and dictates the necessary action to be taken.**
- **It is also clearly places the responsibility for the implementation of the action and the resolution of the associated issues, in a given time scale on named individuals.**

Course Coordinator:

Signature

Date: / / 200