



Course specification
2018- 2019
Faculty of Pharmacy
Mansoura University



المستوى الخامس

Toxicology and Forensic Medicine

University: Mansoura
Faculty : Pharmacy
Department : Toxicology and Pharmacology
Course title: Toxicology and Forensic Medicine

Program on which the course is given	B. Pharm (credit hours)
Academic Level	Five – Semester one
Date of course specification approval	September 2018

1- Basic Information : Course data :

Course title:	Toxicology and Forensic Medicine	Code:	PH-519
Specialization:	Health and Environmental Sciences		
Prerequisite:	Pharmacology-1		
Teaching Hours:	Lecture:	2	Practical: 1
Number of units: (credit hours)	3		

2- Course Aims:

2.1	To understand the basic principles of toxicology and the different disciplines of toxicology.
2.2	To gain knowledge regarding the supportive measures, therapeutic interventions, specific antidotes as general guidelines of treatment modalities.
2.3	To learn the basics of clinical toxicology that will enable the student to diagnose and manage intoxicated patients.
2.4	To understand the serious consequences of exposure to therapeutic drugs, environmental and occupational chemicals

Intended learning outcomes (ILOs):

a- Knowledge and understanding

a1	Understand the general principles of poisoning management; explain actions, interactions, uses and toxicity of certain medications.
a2	List different classes of common toxic substances and environmental pollutants and
a3	Describe the circumstances of intoxication, toxic doses, toxicokinetics, clinical picture, differential diagnosis of different drugs and toxic substances.



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b- Intellectual skills

b1	Analyze, evaluate and interpret clinical cases of toxicity.
b2	Criticize different methods for the management of poisoning in individual cases of toxicity
b3	Apply the knowledge of drug interactions, adverse drug reactions and drug abuse.

c- Professional and practical skills

c1	Undertake risk assessments concerning drug-drug interaction, adverse reaction and toxicity profile.
c2	Learn how to safely handle corrosive substances.
c3	Advise patients on the safe and effective use of drugs while managing the toxicity condition

d- General and transferable skills

d1	Demonstrate clear, sensitive, and effective communication with patients and their families by giving clear advice and communicate effectively with seniors, colleagues, and coworkers.
d2	Use information technology to serve the development of professional practice and to obtain information and knowledge

3- Contents:-

Week No	Topics	No.of hours	Lecture (hr)	Practical
1.	Introduction to toxicology: Clinical strategy for treatment of the poisoned patient.	2	2	
2.	Introduction to toxicology: Clinical strategy for treatment of the poisoned patient (cont.)	2	2	
3.	Introduction to toxicology: Clinical strategy for treatment of the poisoned patient (cont.)	2	2	
4.	Toxic effects of pesticides and metals	2	2	
5.	Toxic effects of pesticides and metals (cont.)	2	2	
6.	Toxic effects of pesticides and metals (cont.)	2	2	
7.	Mid-term	-	-	
8.	Non-organ-directed toxicity	2	2	
9.	Non-organ-directed toxicity (cont.)	2	2	



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10.	Non-organ-directed toxicity (cont.)	2	2	
11.	Non-organ-directed toxicity (cont.)	2	2	
12.	Forensic/analytical toxicology	2	2	
13.	Practical Exam			
15.	Week 15 Final written & oral			
	Practical topics			
1.	Acute toxicity determination	1		1
2.	Cyanide toxicity	1		1
3.	Cardiac glycosides toxicity	1		1
4.	Local toxicity	1		1
5.	Lactose intolerance	1		1
6.	Benzodiazepine toxicity	1		1
7.	Mid-term	1		1
8.	Hydrocarbon aspiration	1		1
9.	Back spot poison oak contact dermatitis	1		1
10.	Drug-induced anaphylactic shock	1		1
11.	Student Seminar	1		1
12.	Student Seminar	1		1
13.	Practical Exam			

4- Teaching and learning Methods:

5.1	Lectures using power point presentations and data show.
5.2	Using white board
5.3	Case Study

5- Student Assessment:

a- Assessment methods:

1-Written exam	To assess understanding, intellectual, professional
2-Practical exam	To assess professional and practical skills
3-Oral	To assess Knowledge, understanding, intellectual skills, general skills and confidence
4-Case study	To assess the skills of problem-solving and date presentation

Assessment schedule

Assessment 1	Mid-term Exam	7 th week
Assessment 2	Practical Exam	13 th week
Assessment 3	Written Exam	15 th week
Assessment 4	Oral Exam	15 th week



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b- Weighting of assessments

1	Mid-term examination	10 %
2	Final-term examination	50 %
3	Oral examination	15 %
4	Practical examination & Semester work	25 %
5	Other types of assessment	0
Total		100%

6 - List of References

N0.	Reference	type
1	Poisoning & Toxicology Compendium by Leikin, Jerrold B. LexiComp, U.S. (1998)	Book
2	Churchill's Pocketbook of Toxicology(Alisonl, Jones, PaulI, Dargan, 2007)	Book
3	Goldfrank's Mannual of Toxicologic emergencies (Michael J Darelano 2002)	Book

7- Matrix of knowledge and skills of the course

No	Course contents	Study Week	ILOS			
			Knowledge & understanding	Intellectual skills	Professional and practical skills	General & transferable skills
1.	Introduction to toxicology: Clinical strategy for treatment of the poisoned patient.	1-3	a1,a2,a3	b1,b2,b3	c1,c2,c3	d1,d2
2.	Toxic effects of pesticides and metals	4-6	a1,a2,a3	b1,b2,b3	c1,c2,c3	d1,d2
3.	Non-organ-directed toxicity	7-11	a1,a2,a3	b1,b2,b3	c1,c2,c3	d1,d2
4.	Forensic/analytical toxicology	12	a1,a2,a3	b1,b2,b3	c1,c2,c3	d1,d2

Course Coordinator :	Prof. Dr. Hatem A Salem
Head of department	Prof. Dr. Manar A Nader