



Jerash University
Faculty of pharmacy
Department of pharmaceutical science
Second semester, 2017/2018

Course Syllabus

Course Title: Toxicology	Course code: 1101535
Course Level: Fourth	Course prerequisite(s) and/or co requisite(s):
Lecture Time: Sunday + Tuesday : 8-9:30	Credit hours: 3 Credit hours

Academic Staff

Specifics

Name	Rank	Office Number and Location	Office Hours	E-mail Address
Dr. Eyad Qunaibi	Associate Professor	Office (409) Faculty of Pharmacy, Phone (513)		eyadqunaibi@yahoo.com

Course module description:

This course contains general principles of toxicology in addition to discussion of the clinically most important intoxicants; their sources, toxic mechanisms, diagnostic procedures, protection, and management of intoxicated patients. In addition, the course discusses the pathological changes that occur in the mostly affected organs in the patient.

Course module objectives:

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

1. Recognize the most important groups of intoxicants
2. Understand the fundamental principles of toxicity such as the toxic dose, TD₅₀, LD₅₀, cumulative and noncumulative toxicity, toxicodynamics and toxicokinetics.
3. Recognize the usual sources of toxic substances
4. Recognize the different procedures of decontamination
5. Recognize the mechanisms of toxic effect of each toxicant group
6. Search for local toxicity data, such as prevalence of toxicity with certain substances in Jordan

Course/ module components

- **Books, power point presentations, computer lab for online data and researches**

References:

Poisoning and Drug Overdose. Olson KR, 7th edition, 2019.

Teaching methods:

No	Teaching Strategies and Methods
1	Formal teaching lectures (Tools: board, data show)
2	Discussion
3	Interactive pharmacokinetic websites and Excel spread sheets.

Learning outcomes:

- The same as those mentioned under (Course Objectives) with emphasis on:
 1. Critical thinking.
 2. Problem-solving skills.
 3. Qualifying the students to self-learn, search for related information.
 4. Digital literacy (use databases, webpages, and applications that are related to the diseases they learn about).

Assessment instruments

Exams and quizzes.

<u>Allocation of Marks</u>	
Assessment Instruments	Mark
First examination	20%
Second examination	20%
Final examination: 50 marks	40%
Quizzes	20%
Total	100%

Course/module academic calendar

Week	Basic and support material to be covered
(1)	Treatment of gout, Immunosuppressant drugs
(2)	Introduction to toxicology
(3)	Emergency treatment of the poisoned patient
(4)	Toxicodynamics and Interactions of chemicals
(5)	Air pollutants
(6)	Solvents and vapors
(7) First examination	Alcohols,
(8)	Organophosphates, cyanide
(9)	Drug toxicity (Acetaminophen, Amphetamines, ACE inhibitors and ARBs, Antibacterials, Anticholinergics)
(10)	Drug toxicity (Newer anticonvulsants, Antidepressants, TCAs,

	Barbiturates)
(11) Second examination	
(12)	Heavy metals (arsenic, lead, mercury, iron, cadmium)
(13)	Heavy metals (arsenic, lead, mercury, iron, cadmium)
Final Examination	

Expected workload:

On average students need to spend 2 hours of study and preparation for each 50-minute lecture/tutorial.

Attendance policy:

Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

References:

Poisoning and Drug Overdose. Olson KR, 7th edition, 2019.