Philadelphia University	PHILADELPHIA UNIVERSITY THE WAY TO THE FUTURE	**Approved Date:**
Faculty: Pharmacy		**Issue:**
Department: Pharmacy		**Credit Hours: 3**
Academic Year: 2021-2022	**Course Syllabus**	**Bachler:**

Course Information

Course No.	Course Title	Prerequisite
0510534	**Toxicology**	**0510335 Pharmacology 2**

Course Type	Class Time	Room No.
☐ Univirsity Requirement ☐ Fuclty Requirement ☐ Major Requirement ☐ Elective ■ Compulsory	Sec1: Sun, Tue: 12:45-14:15	0620

Instructure Information

Name	Office No.	Phone No.	Office Hours	E-mail
Ms.Asma El-Shara	**529**	**2118**		**aelshara@philadelphia.edu.jo**

Course Delivery Method

☐ Blended	☐ Online	■ Physical
Learning Model		
Percentage	**Synchronous**	**Asynchronous**	**Physical**
		100%

Course Description

This course focuses on aspects of toxicology. Students will receive basic background information about important areas in toxicology, which includes the principles of toxicology, Dose- response relationships and mechanisms of toxic action.
Discuss the appropriate detoxification methods for general toxicology, the toxicological effect of heavy metals, products like pesticides and household and different groups of medications and compounds on human health, and commonly types of antidotes and their mechanism of action.

Course Learning Outcomes

Number	Outcome	Corresponding Program Outcomes	Corresponding Competencies
Knowledge			
K1	To be familiar of main terminology and definitions in toxicology.	**Kp1,**	**C1**
K2	Understand the basic principles of toxicokinetics and toxicodynamics	**Kp1**	**C1**
K3	Have knowledge of different types of toxicants (household/industrial, medical, and drugs of abuse) and their mechanism of toxicity	**Kp1**	**C1**
K4	Provide knowledge of the most commonly encountered antidotes, their mechanisms of actions, routes of administration	**Kp1, Kp2**	**C1, C2**
K5	To be familiar of clinical presentation of intoxicated patients	**Kp1, Kp2**	**C1, C2**
K6	To be familiar of general principles for the management of poisoned patients.	**Kp1, Kp2**	**C1, C2**
Skills			
S1	Apply the knowledge obtained from this course to evaluate exposure associated with toxicants.	**Sp1, Sp2**	**C7. C8**
S2	Apply the knowledge obtained from this course to solve problems associated with toxicants.	**Sp1, Sp2**	**C7. C8**

Learning Resources

Course Textbook	Toxicology: the basic science of poisons, casarett and doulls, 8 ed, 2013 -Clinical toxicology, principles and mechanisms, 2 ed , Frank A. Barile,2010
Supporting References	Casarett & Doull's: Essentials of Toxicology, 3rd Ed. 2015 by Curtis Klaassen and John Watkins III
Supporting Websites	- American College of Toxicology, www.actox.org/ - International journal of toxicology, ijt.sagepub.com/ - British National Formulary (BNF), https://www.bnf.org/
Teaching Environment	■ **Classroom** ☐ **laboratory** ☐ **Learning Platform** ☐ **Other**

Meetings and Subjects Time Table

Week	Topic	Learning Method*	Task	Learning Material
1	**Vision and Mission of Faculty of Pharmacy** **Course Syllabus** **Introduction**	Lecture		Provided in the Learning Resources table
2	Principles of Toxicology	Lecture		
3	Toxicokinetics and Toxicodynamics of toxicants	Lecture		
4	Toxicokinetics and Toxicodynamics of toxicants	Lecture		
5	General approaches to the management poisoned patients	Lecture		
6	General approaches to the management poisoned patients	Lecture		
7	Drugs toxicology: (analgesics) Acetaminophen, Salicylates, and NSAID	Lecture Problem solving based learning	Case study	
8 Mid exam	Drugs toxicology: (analgesics) Acetaminophen, Salicylates, and NSAID	Lecture Problem solving based learning		
9	Drugs of abuse: Opioids	Lecture		
10	Sympathomimetics toxicology : (Nicotine, Xanthine, Pseudoephedrine)	Lecture Collaborative learning		
11	Drugs toxicology: Antihistamine + Digoxin + Tricyclic antidepressants.	Lecture		
12	Heavy metals toxicology (lead, mercury, cyanide, iron, cadmium, arsenic, and copper)	Lecture Problem solving based learning	Case study	
13	Heavy metals toxicology (lead, mercury, cyanide, iron, cadmium, arsenic, and copper)	Lecture Problem-solving based learning		
14	Pesticides and household toxicology	Lecture		
15	Pesticides and household toxicology	Lecture		
16	**Final Exam**			

*Includes: lecture, flipped Class, project based learning, problem solving based learning, collaboration learning.

Course Contributing to Learner Skill Development

Using Technology
• Using powerpoint or any relevant program for preparing presentations
Communication Skills
• Interaction in class while solving case-study
Application of Concept Learnt
• Apply the knowledge obtained from this course to evaluate exposure associated with toxicants. • Apply the knowledge obtained from this course to solve problems associated with toxicants.

Assessment Methods and Grade Distribution

Assessment Methods	Grade	Assessment Time (Week No.)	Course Outcomes to be Assessed
Mid Term Exam	**30%**	**11th Week**	**K1, K2, K3, K4, K5, K6**
Term Works*	**30%**	**Continous**	**K1, K6, S1, S2**
Final Exam	**40%**	**16th Week**	**K3, K4, K5, K6**
Total	**100%**		

* Include: quizzes, in-class and out of class assignment, presentations, reports, videotaped assignment, group or individual project.

Alignment of Course Outcomes with Learning and Assessment Methods

Number	Learning Outcomes	Corresponding Competencies	Learning Method*	Assessment Method**
Knowledge				
K1	To be familiar of main terminology and definitions in toxicology.	**C1**	Lectures	Subjective quiz Exam/Objective questions
K2	Understand the basic principles of toxicokinetics and toxicodynamics	**C1**	Lectures	Subjective quiz Exam/Objective questions
K3	Have knowledge of different types of toxicants (household/industrial, medical, and drugs of abuse) and their mechanism of toxicity	**C1**	Lecture Problem solving based learning Collaborative learning	Case Study Exam/Objective questions
K4	Provide knowledge of the most commonly encountered antidotes, their	**C1, C2**	Lecture Problem	Case Study Subjective quiz

	mechanisms of actions, routes of administration		solving based learning	Exam/Objective questions
K5	To be familiar of clinical presentation of intoxicated patients	**C1, C2**	Lecture Problem solving based learning	Case Study Subjective quiz Exam/Objective questions
K6	To be familiar of general principles for the management of poisoned patients.	**C1, C2**	Lecture Problem solving based learning	Case Study Subjective quiz Exam/Objective questions
Skills				
S1	Apply the knowledge obtained from this course to evaluate exposure associated with toxicants.	**C7. C8**	Lecture Problem solving based learning	Case Study Subjective quiz Exam/Objective questions
S2	Apply the knowledge obtained from this course to solve problems associated with toxicants.	**C7. C8**	Lecture Problem solving based learning	Case Study Subjective quiz Exam/Objective questions

*Include: lecture, flipped class, project based learning, problem solving based learning, collaboration learning.
** Include: quizzes, in-class and out of class assignments, presentations, reports, videotaped assignments, group or individual projects.

Course Polices

Policy	Policy Requirements
Passing Grade	The minimum pass for the course is (50%) and the minimum final mark is (35%).
Missing Exams	• Anyone absent from a declared semester exam without a sick or compulsive excuse accepted by the dean of the college that proposes the course, a zero mark shall be placed on that exam and calculated in his final mark. • Anyone absent from a declared semester exam with a sick or compulsive excuse accepted by the dean of the college that proposes the course must submit proof of his excuse within a week from the date of the excuse's disappearance, and in this case, the subject teacher must hold a compensation exam for the student. • Anyone absent from a final exam with a sick excuse or a compulsive excuse accepted by the dean of the college that proposes the material must submit proof of his excuse within three days from the date of holding that exam.
Attendance	The student is not allowed to be absent more than (15%) of the total hours prescribed for the course, which equates to six lecture days (n t) and seven lectures (days). If the student misses more than (15%) of the total hours prescribed for the course without a satisfactory or compulsive excuse

	accepted by the dean of the faculty, he is prohibited from taking the final exam and his result in that subject is considered (zero), but if the absence is due to illness or a compulsive excuse accepted by the dean of the college that The article is introduced, it is considered withdrawn from that article, and the provisions of withdrawal shall apply to it.
Academic Integrity	Philadelphia University pays special attention to the issue of academic integrity, and the penalties stipulated in the university's instructions are applied to those who are proven to have committed an act that violates academic integrity, such as cheating, plagiarism (academic theft), collusion, intellectual property rights.

Program Learning Outcomes to be Assessed in this Course

Number	Learning Outcome	Course Title	Assessment Method	Targeted Performance level

Description of Program learning Outcomes Assessment Method

Number	Detailed Description of Assessment

Assessment Rubric of the Program Learning Outcomes
