Philadelphia University

Faculty: Pharmacy Department: Academic Year: 2021-2022

THE WAY TO THE FUTURE

PHILADELPHIA UNIVERSITY **Approved Date:**

Issue: Credit Hours: 2 Bachler:

Course Syllabus Course Information

| Course No. | ourse No. Course Title | | | | Prereq | uisite |
|--|------------------------|------------------------|------|----------------------|-----------------|--------|
| 0520522 | Toxicology | | | | 0520 Pharmac | |
| Course Type | | | Clas | s Time | Room No. | |
| □ Univirsity Requirement □ Fuclty Requirement □ Elective □ Comparison | | Requirement Compulsory | | Sun, Tue: – 10.35 | 310 | |

Instructure Information

| Name | Office No. | Phone No. | Office Hours | E-mail |
|------------------------|---|-----------|---|--------------------------------------|
| Dr. Yousef Abusamra | 408 / Faculty of Nursing – 1 st floor | 2174 | Sun/Tues. 9.00-9.45 10.35– 11.00 Mon/Wed 9.00-9.45 11.00-12.00 | <u>yabusamra@philadelphia.edu.jo</u> |

Course Delivery Method

| Blended | 🗌 Onli | ne P | Physical | |
|----------------|-------------|--------------|----------|--|
| Learning Model | | | | |
| Doroontogo | Synchronous | Asynchronous | Physical | |
| Percentage | | | 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 common types of antidotes and their mechanism of action.

Course Learning Outcomes

| Number | Outcome | Corresponding Program Outcomes | Corresponding Competencies | | | |
|--------|--|--------------------------------------|-------------------------------|--|--|--|
| | Knowledge | | | | | |
| K1 | To be familiar with the main terminology and definitions in toxicology. | Kp1, | C1 | | | |
| K2 | Understand the basic principles of toxicokinetics and toxicodynamics | Kp1 | C1 | | | |
| К3 | To know different types of toxicants (household/industrial, medical, and drugs of abuse) and their mechanism of toxicity | Kp1 | C1 | | | |
| К4 | Provide knowledge of the most commonly encountered antidotes, their mechanisms of actions, routes of administration | Kp1, Kp2 | C1, C2 | | | |
| K5 | To be familiar with the clinical presentation of intoxicated patients | Kp1, Kp2 | C1, C2 | | | |
| K6 | To be familiar with 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, 3 ^{ed} 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

| | | Learning | | Looming |
|----------|---|--------------------------------------|---------------|----------------------|
| Week | Торіс | Learning Method* | Task | Learning Material |
| 1 | Vision and Mission of Faculty of Pharmacy Course Syllabus | Lecture | | |
| | Introduction | | | |
| 2 | Principles of Toxicology | Lecture | | |
| 3 | Toxicokinetics and Toxicodynamics of toxicants | Lecture | | |
| 4 | Toxicokinetics and Toxicodynamics of toxicants | Lecture | | |
| 5 | Toxicokinetics and Toxicodynamics of toxicants | Lecture | | |
| 6 | Toxicokinetics and Toxicodynamics of toxicants | Lecture | | |
| 7 | General approaches to the management poisoned patients | Lecture Problem solving | Case study | Provided in |
| | | based learning | | the Learning |
| 8 Mid | General approaches to the management poisoned patients | Lecture | | Resources table |
| exam | | Problem solving based learning | | |
| 9 | Toxicity of Heavy Metals | Lecture | | |
| 10 | Toxicity of Heavy Metals | Lecture Collaborative learning | | |
| 11 | Toxicity of Heavy Metals | Lecture | | |
| 12 | Toxicity of Heavy Metals | | | |
| 13 | Pesticides and household toxicology | Lecture Problem solving | Case study | |
| | | based learning | | |
| 14 | Pesticides and household toxicology | Lecture | | |
| 15 | Animal toxins | 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 |
| ٠ | 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
MethodsGradeAssessment Time
(Week No.)Course Outcomes
to be AssessedMid Term Exam30%11th WeekK1, K2, K3, K4,
K5, K6

Continuous 16th Week

K1, K6, S1, S2

K3, K4, K5, K6

Assessment Methods and Grade Distribution

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

30%

40%

100%

Term Works*

Final Exam

Total

Alignment of Course Outcomes with Learning and Assessment Methods

| terminology and definitions Exam/C in toxicology. Exam/C K2 Understand the basic C1 Lectures Subject principles of toxicokinetics and toxicodynamics Exam/C quest | ective quiz n/Objective |
|---|--|
| terminology and definitions in toxicology.Exam/C Exam/C questK2Understand the basic | 1 |
| K2Understand the basic principles of toxicokinetics and toxicodynamicsC1LecturesSubject Subject Exam/C questK3Have knowledge ofC1LectureCase | n/Objective |
| principles of toxicokinetics and toxicodynamics Exam/C K3 Have knowledge of C1 Lecture Case | uestions |
| - 0 - | ective quiz n/Objective uestions |
| (household/industrial, Problem Exam/C | se Study n/Objective uestions |

| | | | learning | |
|----|--|---------------|----------|-----------------|
| K4 | Provide knowledge of the most commonly | C1, C2 | Lecture | Case Study |
| | encountered antidotes, their | | Problem | Subjective quiz |
| | mechanisms of actions, | | solving | |
| | routes of administration | | based | Exam/Objective |
| | | | learning | questions |
| K5 | To be familiar of clinical presentation of intoxicated | C1, C2 | Lecture | Case Study |
| | patients | | Problem | Subjective quiz |
| | | | solving | |
| | | | based | Exam/Objective |
| | | | learning | questions |
| K6 | To be familiar of general principles for the | C1, C2 | Lecture | Case Study |
| | management of poisoned | | Problem | Subjective quiz |
| | patients. | | solving | |
| | | | based | Exam/Objective |
| | | | learning | questions |
| | | Skills | T | 1 |
| S1 | Apply the knowledge obtained from this course to | C7. C8 | Lecture | Case Study |
| | evaluate exposure | | Problem | Subjective quiz |
| | associated with toxicants. | | solving | |
| | | | based | Exam/Objective |
| | | | learning | questions |
| S2 | Apply the knowledge | C7. C8 | Lecture | Case Study |
| | obtained from this course to | | | |
| | solve problems associated | | Problem | Subjective quiz |
| | with toxicants. | | solving | |
| | | | based | Exam/Objective |
| | | | learning | 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 Pol | ices |
|-------------------|------|
|-------------------|------|

| 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 |
|--------|------------------|-----------------|----------------------|----------------------------------|
| | | | | |
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Description of Program learning Outcomes Assessment Method

| Number | Detailed Description of Assessment | | |
|--------|------------------------------------|--|--|
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Assessment Rubric of the Program Learning Outcomes