


Philadelphia University	 PHILADELPHIA UNIVERSITY <small>THE WAY TO THE FUTURE</small>	Approved Date:
Faculty: Pharmacy		Issue: 18/10/2021
Department:-		Credit Hours: 1
Academic Year:		Course Syllabus

Course Information

Course No.	Course Title	Corequisite	
0510336	Pharmacology 2 Practical	Pharmacology 1 (0520328)	
Course Type		Class Time	Room No.
<input type="checkbox"/> University Requirement <input type="checkbox"/> Faculty Requirement <input checked="" type="checkbox"/> Major Requirement <input type="checkbox"/> Elective <input checked="" type="checkbox"/> Compulsory			

Instructor Information

Name	Office No.	Phone No.	Office Hours	E-mail

Course Delivery Method

<input type="checkbox"/> Blended <input type="checkbox"/> Online <input checked="" type="checkbox"/> Physical			
Learning Model			
Percentage	Synchronous	Asynchronous	Physical
			100%

Course Description

This practical course focuses on studying pharmacological experiments from different fields. It concerns about the use of animals in pharmacological experiments, the appropriate handling of different types of animals and the different routes of administration that could be used to deliver a drug or a chemical substance to a certain target in the animal body. Certain pharmacological experiments will be discussed in this course such as analgesic effect of a drug, parasympathetic activity and others.

Course Learning Outcomes

Number	Outcome	Corresponding Program Outcomes	Corresponding Competencies
Knowledge			
K1	Gain knowledge of all aspects about animals which are used in pharmacological experiments and his/ her understanding of appropriate handling and restraining of these animals.	Kp1	C1
K2	Gain knowledge of analyzing different pharmacological experiment results, and improving the student ability to discuss and explain these results in an objective way.	Kp 3	C3
Skills			
S1	To be able to distinguish between types of animals are used in pharmacological studies, and know the most common studies which animal is used in pharmacological experiments.	Sp2, Sp3	C8,C9
S2	To learn the appropriate methods of handling and restraining an animal, considering its size, the objective of the experiment and the route of administration.	Sp3	C9
S3	To learn how to give an animal an injection practically intraperitoneal, subcutaneous, and intramuscular.	Sp 1,Sp 7	C7.C13
S4	To be able to analyze and discuss results from a certain pharmacological experiments.	Sp2	C8

Learning Resources

Course Textbook	Manual of Pharmacology 2 Practical from the University Bookshop.
Supporting References	<ol style="list-style-type: none"> 1. Lippincotts illustrated reviews' pharmacology, R.finkel, 6th Edition (2015). 2. Experimental pharmacology, K.KPILLAI, 1th,(2006). 3. Pharmacology laboratory manual, K.C singhal, 2th Edition (2005). 4. Basic and clinical pharmacology, B.G.Katzung, 13th Edition (2015).
Supporting Websites	http://www.philadelphia.edu.jo/pharmacy/resources.html
Teaching Environment	<input type="checkbox"/> Classroom <input checked="" type="checkbox"/> laboratory <input type="checkbox"/> Learning Platform <input type="checkbox"/> Other

Meetings and Subjects Time Table

Week	Topic	Learning Method*	Task	Learning Material
1	Vision and Mission of Faculty of pharmacy Course Syllabus Introduction to safety rules	lecture		Vision and Mission of Faculty of pharmacy Course syllabus Manual
2	Introduction to pharmacology 2 practical	Lecture Practical work	In-class assignment	Manual
3	Animal types used in pharmacological experiments	lecture Practical work	In-class assignment	Manual
4	Handling and restraining of animals (part 1)	Lecture Practical work	In-class assignment videotaped assignments	Manual
5	Handling and restraining of animals (part 2)	Lecture Practical work	In-class assignment videotaped assignment	Manual
6	Routs of administration of drugs in animals in pharmacological experiments (part 1)	lecture Practical work	In-class assignment videotaped assignment	Manual
7	Routs of administration of drugs in animals in pharmacological experiments (part 2)	lecture Practical work	In-class assignment videotaped assignment	Manual
8	Lab off due to Mid exam			
9	Testing of analgesics effects on mice and Parasympathetic drugs effects on rats	lecture Practical work	In-class assignment videotaped assignment	Manual
10	Effect of different types of anesthetic drugs on	lecture Practical work	In-class assignment videotaped assignment	Manual
12	Group or individual project	project based learning		
13	Final Examination			

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

Course Contributing to Learner Skill Development

Using Technology
<ul style="list-style-type: none"> • Computer to demonstrate pharmacology experiments • Computer program for simulated pharmacology experiments
Communication Skills
<ul style="list-style-type: none"> • Writing Reports • Team Working
Application of Concept Learnt
<ul style="list-style-type: none"> •

Assessment Methods and Grade Distribution

Assessment Methods	Grade	Assessment Time (Week No.)	Course Outcomes to be Assessed
Reports & Homework	% 30	Week 2-7 Week 9-11	K1 & K2 S1 ,S2 , S3 & S4
Quizzes	% 20	Week 3,week 4 week 7, week 9	K1 & K2 S1 , S2,S3 & S4
Group or individual project	% 10	Week 12	K1,K2 S1 , S2,S3 & S4
Final Exam	% 40	Week 13	K1 & K2 S1 , S3 & S4
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	Gain knowledge of all aspects about animals which are used in pharmacological experiments and his/her understanding of appropriate handling and restraining of these animals.	C1	Lecture Practical work	In-class assignments Videotaped assignments Quizzes Final Exam
K2	Gain knowledge of analyzing different pharmacological experiment results, and improving the student ability to discuss and explain these results in an objective way.	C3	Lecture Practical work	In-class assignments Videotaped assignments Quizzes Final Exam
Skills				
S1	To be able to distinguish between types of animals are used in pharmacological studies, and know the most common studies which animal is used in pharmacological experiments.	C8,C9	Lecture Practical work	In-class assignments Videotaped assignments Quizzes Final Exam
S2	To Learn the appropriate methods of handling and restraining an animal, considering its size, the objective of the experiment and the route of administration.	C9	Lecture Practical work	In-class assignments Videotaped assignments Quizzes Final Exam

S3	To Learn how to give an animal an injection practically intraperitoneal, subcutaneous, and intramuscular.	C7,C13	Lecture Practical work	In-class assignment Videotaped assignment Quizzes Final Exam
S4	To be able to analyze and discuss results from a certain pharmacological experiments.	C8	Lecture Practical work	In-class assignment Videotaped assignment Quizzes Final Exam

*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	<ul style="list-style-type: none"> • 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 two lecture 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.
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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