

Philadelphia University	 PHILADELPHIA UNIVERSITY THE WAY TO THE FUTURE	Approved Date: 11/2/2022
Faculty: Pharmacy		Issue: 1
Department:		Credit Hours: 3
Academic Year: 2021/2022		Course Syllabus

Course Information

Course No.	Course Title	Prerequisite
0510120	Pharmaceutical Organic Chemistry (1)	0212103
Course Type		Room No.
<input type="checkbox"/> University Requirement <input type="checkbox"/> Faculty Requirement <input type="checkbox"/> Major Requirement <input type="checkbox"/> Elective <input checked="" type="checkbox"/> Compulsory		507
Class Time		
Sunday-Tuesday 9:45-11:15 Monday, Wednesday 12:45 – 2:15		

Instructor Information

Name	Office No.	Phone No.	Office Hours	E-mail
Dr. Mohammad Aldhoun	510	2327	Sunday to Thursday 11:00-12:45 am	maldhoun@philadelphia.edu.jo

Course Delivery Method

Learning Model			
Percentage	Synchronous	Asynchronous	Physical
			100%

Course Description

This course provides students with the basic knowledge of hydrocarbons (alkanes, alkenes, and alkynes) and alkyl halides in addition to stereochemistry including nomenclature, properties, preparation, and reactions. Particular emphasis is given on the mechanisms of addition, substitution and elimination reactions.

Course Learning Outcomes

Number	Outcome	Corresponding Program Outcomes	Corresponding Competencies
Knowledge			
K1	To acquire knowledge of naming different organic compounds	Kp1	C1
K2	To describe different organic reactions and their mechanism	Kp1	C1
K3	To demonstrate the relative reactivity, acidity, and basicity of organic compounds	KP1	C1
K4	To acquire knowledge about the stereochemistry		
Skills			
S1	Drawing the chemical structure of given organic molecules	Sp2	C8
S2	Able to arrange the molecules according to their reactivity, or acidity, or basicity	SP2	C8
S3	Writing the reaction mechanism and Plan to synthesize different compounds according to their understanding of functional groups reactions.	SP2	C8
S4	Ability to deal with the three dimensional aspect of the molecule.	Sp2	C8

Learning Resources

Course Textbook	Organic Chemistry, John McMurry, 9th edition, 2016
Supporting References	Organic Chemistry, T. W. Graham Solomons, Craig B. Fryhle, Scott A. Snyder, 11 th edition, 2013
Supporting Websites	None
Teaching Environment	<input checked="" type="checkbox"/> Classroom <input type="checkbox"/> laboratory <input checked="" type="checkbox"/> Learning Platform <input type="checkbox"/> Other

Meetings and Subjects Timetable

Week	Topic	Learning Method*	Task	Learning Material
1 & 2	Structure and Bonding, Polar Covalent Bonds; Acids and Bases	Lecture	homework	Chapter 1 & 2
3 & 4	Organic Compounds: Alkanes and Their Stereochemistry	Flipped learning		Chapter 3
5	Organic Compounds: Cycloalkanes and Their Stereochemistry	Problem solving		Chapter 4
6	An Overview of Organic Reactions,			Chapter 5

7 & 8	Alkene: Structure and Reactivity			Chapter 6
	Midterm examination	Exam	Exam	-
9 & 10	Alkenes: Reactions and Synthesis	Lecture		Chapter 7
11 & 12	Alkynes: An Introduction to Organic Synthesis	Flipped learning		Chapter 8
	Stereochemistry at Tetrahedral Centers			Chapter 9
13	Organohalides			Chapter 10
14 & 15	Reactions of Alkyl halides: Nucleophilic Substitutions and Elimination	Problem solving		Chapter 11
16	Final Examination	Exam	Exam	-

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

Course Contributing to Learner Skill Development

Using Technology
Using Google and Google scholar to search on topics of interest in organic chemistry
Communication Skills
Organic chemistry allows the students to use what they learned from the course to explain, communicate, and predict what follows. Each student will be able to use this skill and communicate in a way to apply what he has learned, reasoning this way to a solution rather than memorizing
Application of Concept Learnt
Enrich and enhance the scientific background regarding organic molecules (structure and their reactions)

Assessment Methods and Grade Distribution

Assessment Methods	Grade	Assessment Time (Week No.)	Course Outcomes to be Assessed
Quizzes	30 %	Continuous	K1, K2,K3, K4 S1,S2,S3 , S4
Midterm	30 %	11 th week	K1, K2,K3 , K4 S1,S2,S3, S4
Final Exam	40%	16 th week	K1, K2,K3, K4 S1,S2,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	To acquire knowledge of naming different organic compounds	C1	Lecture Flipped learning	Exam/ subjective and objective questions

			Problem solving	
K2	To describe different organic reactions and their mechanism	C1	Lecture Flipped learning Problem solving	Exam/ subjective and objective questions
K3	To demonstrate the relative reactivity, acidity, and basicity of organic compounds	C1	Lecture Flipped learning Problem solving	Exam/ subjective and objective questions
K4	To acquire knowledge about the stereochemistry	C1	Lecture Flipped learning Problem solving	Exam/ subjective and objective questions
Skills				
S1	Drawing the chemical structure of given organic molecules	C8	Lecture Flipped learning Problem solving	Exam/ subjective and objective questions
S2	Able to arrange the molecules according to their reactivity, or acidity, or basicity	C8	Lecture Flipped learning Problem solving	Exam/ subjective and objective questions
S3	Writing the reaction mechanism and Plan to synthesize different compounds according to their understanding of functional groups reactions.	C8	Lecture Flipped learning Problem solving	Exam/ subjective and objective questions
S4	Ability to deal with the three dimensions aspect of the molecule.	C8	Lecture Flipped learning Problem solving	Exam/ subjective and 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	<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 absents 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 absents 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

