Philadelphia University
Faculty of Science
Department of Basic Sciences
First Semester 2012/2013

Syllabus, Organic Chemistry, 0212243

Academic Staff Specifics

Instructor: Dr. Nader Robin Al Bujuq
Academic rank: Assistant Professor
Office: Faculty of Science (1018)
My office hours and schedule: **09.00-10.00, Su, Tu, Thu and 11:30-12:30 Mo, Wed**
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Course Syllabus

Course Title: Organic Chemistry
Course code: 0212243
Course Level: 2
Course prerequisite (s) and/or corequisite (s): pass general chemistry I and II
Credit hours: **3**
Lecture Time: **10:10- 11:10** (Su, Tue, Thu)

The required text book

Title: *Organic Chemistry*
Author: Graham Solomons
Publisher: Wiely
ISBN: 13: 978-0-471-68496
Edition: 9th edition (**2008**)

Course module description:

This course presents a brief survey of concepts and applications of organic chemistry. Also it provides a solid base for the subject that promotes understanding and critical thinking, while simultaneously limiting the scope of the presentation.

Course module objectives:

Devote a significant portion to structure and naming of organic compounds and then cover the preparation methods and reactions of the various organic functional groups with a very brief discussion of reactions mechanisms.

Course/ module components

Support material (s) (data show and power point slides presentation, models).

Teaching methods:
Lectures, discussion groups, tutorials, problem solving, debates, etc.

Learning outcomes:

- Knowledge and understanding
  - Have an understanding of organic chemistry principles.
  - Understand electronic structure of the basic organic groups including the most common functional groups.
  - Understand the common organic reactions and their mechanisms.
  - Study the main bioorganic compounds and their major role in daily life.

- Cognitive skills (thinking and analysis).
  Identifying and solving organic chemistry problems. Handle the naming of the organic molecules. Differentiating between organic functional groups.

- Communication skills (personal and academic).
  Encourage the students to be self starters (creativity, decisiveness, initiative) and to finish the chemical problems properly (flexibility, adaptability). Also to improve general performance of students through the interaction with each other in solving different chemical problems.

Assessment instruments

- Quizzes.
- First and second exams
- Home works
- Final examination: 40 marks

Allocation of Marks	
Assessment Instruments	**Mark**
First examination	**20**
Second examination	**20**
Final examination	**40**
3 short Quizzes and Home works, Reports	**20**
Total	**100**

Course/module academic calendar

Week	Basic and support material to be covered
(1), (2)	Bonding and molecular structure and acid bases
(3), (4)	Representation carbon compounds and introduction to organic reactions
(5), (6)	Alkenes & alkynes, structure and nomenclature
(7) First exam	Stereochemistry
(8), (9)	Ionic reactions and nucleophilic addition reactions
(10), (11)	Alkenes and alkynes : properties and synthesis
(12) Second exam	Aromatic Compounds
(13), (14)	Reaction of aromatic compounds
(15), (16) Final exam	Alcohols, phenols &ethers

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.

Module references

Books: Organic chemistry
Author: Francis A. Carey
Publisher: Mc Graw Hill
ISBN**:** 978-0-07-304787-4
Edition: 7^{th}