Philadelphia University
Faculty of Science
Department of Basic Sciences
Spring semester, 2008/2009

Course Syllabus

Course Title: Organic Chemistry	**Course code: 240243 or 212243**
Course Level: 2	**Course prerequisite (s) and/or corequisite (s): 212101**
Lecture Time: 12:10-1:00	**Credit hours: 3**

Academic Staff Specifics

Name	Rank	Office Number and Location	Office Hours	E-mail Address
Dr. Safwan Obeidat	Assistant Prof.	Faculty of Science (1018)	11-12 S, Tu, Th 10-11 M, W	Sobidat@Philadelphia.edu.j

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 very brief discussion of reactions mechanisms. Finally the material on which life depends – carbohydrates, lipids and proteins will be presented.

Course/ module components

- **Books (title , author (s), publisher, year of publication)**

  Text book:
  Title: Fundamental of Organic Chemistry
  Auther: McMurry,John
  Publisher:Pacific Grove,CA,:Thomson
  ISBN**: 0-534-39580-5**

- **Support material (s) (Handouts, 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 bio-organic compounds and their major role in daily life.

- Cognitive skills (thinking and analysis).
  Identifying and solve organic chemistry problems. Handle the naming of the organic molecules. Differentiating different 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.

- Practical and subject specific skills (Transferable Skills).
  Gaining knowledge and experience of working with relevant modern laboratory equipment.

Assessment instruments

- Short reports and/ or presentations, and/ or Short research projects
- Quizzes.
- Home works
- Final examination: 50 marks

Allocation of Marks	
Assessment Instruments	**Mark**
First examination	**20**
Second examination	**20**
Final examination: 50 marks	**50**
Reports, research projects, Quizzes, Home works, Projects	**10**
Total	**100**

Documentation and academic honesty

- Documentation style (with illustrative examples)
  APA Style.
  Example: Natarajan, R., & Chaturvedi, R. (2003). *Geology of the Indian Ocean Floor*. Hartford, CT: Merganser University Press
- Protection by copyright
- Avoiding plagiarism.

Course/module academic calendar

week	Basic and support material to be covered
(1)	Structure and Bonding
(2)	Acids and Bases
(3)	Alkanes, structure and nomenclature
(4)	Alkenes & alkynes, structure and nomenclature
(5)	Reactions of alkanes, preparation of alkenes & alkynes and their reactions.
(6) First examination	Aromatic Compounds
(7)	Aromatic Compounds
(8)	Stereochemistry
(9)	Alkyl Halides
(10)	Alkyl Halides
(11) Second examination	Nucleophilic Addition reactions
(12)	Alcohols, phenols &ethers
(13)	Aldehydes& ketones Carboxylic acids
(14)	Derivatives of carboxylic acids
(15)	Carbohydrates
(16) Final Examination	Lipids& proteins

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 Auther T. W Graham Solomons, Craig B. Fryhle
Publisher: Wiley; 8 edition (2003)
ISBN**:** 0471417998

Journals
Journal of Organic Chemistry

Websites
http://www.delta.edu/mgrobert/Outlines/OrgChem.html