

American University of Beirut
Faculty of Arts and Sciences
Department of Chemistry

Chem 208: Brief Survey of Organic Chemistry
Course Syllabus
Spring 2017-2018

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O.H.: **To be decided later**

1. Course Description and Learning Outcomes

a- Course description (from AUB catalogue):

Chemistry 208 covers brief survey of the following topics in organic chemistry: hydrocarbons, stereoisomerism, organo halogens, oxygen containing groups, carbonyl groups, carboxylic acids and their derivatives, and amines. This course is designed for students majoring in agriculture or public health.

b- Intended Learning Outcomes:

The student should be able to:

- i. Recognize the importance of organic chemistry in our daily life.
- ii. Explain different types of strains and conformations of organic compounds.
- iii. Describe nucleophilic substitution and elimination reactions.
- iv. Explain functional groups transformations and their chemistry.
- v. Analyze simple synthetic organic mechanisms.

2. Resources Available to Students

Textbook:

Brown, W.; Poon, T. in *Introduction to Organic Chemistry*, 6th Edition, **2017**.

Other resources can be accessed through WileyPlus at www.wileyplus.com

Other resources:

- I. This course is a Moodle course. Various Moodle tools such as “Course Announcements”, “Questionnaires”, “Choices”, and “Forums” will be used.

- a. "Questionnaires" are to be used to collect students' feedback about the course during the semester. "Exit Questionnaire" will be posted after final grades become available on students' AUBsis.
 - b. "Choices" will be used to collect students' electronic signatures on possible propositions during the semester.
 - c. "Forums" will be used to post questions by the instructor about the material. Students will enter and discuss their answers. The correct answers will be posted by the instructor at the appropriate time.
 - d. Animation movies of key reaction mechanisms (S_N1 , S_N2 , E1, E2, Addition, Radical, Electrophilic Aromatic Substitution, Diels-Alder) will be posted.
 - e. Online assignments (using WileyPlus) will be posted regularly during the semester.
- II. **Classroom Response System (CRS)** will be used during this semester. Students will be provided with a "clicker" during some of the lectures. Multiple choice questions with four/five possible choices will be presented. During the session, students can be randomly paired in groups of two and each group will be provided with a clicker. Questions will be presented and time will be given to students to enter their answers. When responses are collected- this will be shown on the slide as well, the statistics of students' answers will be shown and detailed explanation of every question and given choices will be provided. *Occasional "clickers" sessions will be conducted during the semester.*
- III. A **Facebook account** is made for my organic courses: <http://www.facebook.com/kaafarorganic.chemistry>
- IV. All lectures are taught in interactive way (powerpoint). PDF files of the lectures are posted on Moodle ahead of lecture. The syllabus, lectures, and other course-related materials are available on Moodle.

3. Grading Criteria

There will be two 60-minute **MOODLE Exams** given during the semester and a final **MOODLE Examination** (2 hours) to conclude the course.

Exam I: Date to be decided later

Exam II: Date to be decided later

Final Exam: covers all the material taught in the course. The date, place and timing of the final will be posted by the Registrar's office.

The final grade will be a weighted average of two quizzes (20% each), assignments (20%) and the final exam (40%). When a student misses one quiz with a valid excuse (**there are no make ups for quizzes**), the final grade will be a weighted average of one quiz (30%), assignments (20%) and the final exam (50%). Student who misses a QUIZ without a valid excuse will get a zero on that Quiz. Student who misses two QUIZZES should drop the course.

4. Schedule

a- Lectures:

There will be *two* 50-minute lectures per week (MW 8:00 to 8:50 AM in Chem 001). In these lectures, the most important aspect of the course material will be presented. Extra lectures may be arranged to cover the material.

Recitations:

Section 1	12:00 PM, Wednesday	Phys 217
Section 2	11:00 AM, Wednesday	Chem 101
Section 3	10:00 AM, Wednesday	Physics 327

Chapter	Material covered
1	Covalent Bonding and Shapes of Molecules
2	Acids and Bases
3	Alkanes and Cycloalkanes
4	Alkenes and Alkynes
5	Reactions of Alkenes and Alkynes
6	Chirality: The Handedness of Molecules
7	Haloalkanes
8	Alcohols, Ethers, and Thiols
9	Benzene and Its Derivatives
10	Amines
12	Aldehydes and Ketones
13	Carboxylic Acids
14	Functional Derivatives of Carboxylic Acids

5. Course Policy

- i. *Attendance:* Students are urged to attend all lectures and classes. If a student misses a lecture or a class, he/she is entirely responsible for the material covered as well as any announcement that was made during class time. Students are also urged to read the assigned material before coming to class, in order to fully benefit from class work. Furthermore, students are strongly advised to study up-to-date the covered material.
- ii. AUB strives to make learning experiences as accessible as possible. If you anticipate or experience academic barriers due to a disability (including mental health, chronic or temporary medical conditions), please inform me immediately so that we can privately discuss options. In order to help establish reasonable accommodations and facilitate a smooth accommodations process, you are encouraged to contact the Accessible Education Office: accessibility@aub.edu.lb; +961-1-350000, x3246; West Hall, 314.
- iii. *Missing a quiz or the Final Exam:* No make-ups will be given for missed quizzes. A make-up for a missed final exam will be given only after the Students' Academic Affairs Committee of the Faculty of Arts and Sciences approves the request for such

a make-up. Additional information about make-up examinations can be found in the AUB catalogue.

- iv. *Cheating*: Any student caught cheating or attempting to cheat during an exam will be asked to leave the exam. The case will also be reported to the Students Disciplinary Affairs Committee for further action to be taken. Such action could include the student receiving a failing grade in the course and a Dean's warning as well as the possibility of being dismissed from the University.
- v. *Class discipline*: No eating, drinking, smoking or use of mobile phones/beepers is permitted during class time. The instructor reserves the right to dismiss from class, any student acting in a manner that is considered disruptive or counterproductive to the teaching/learning environment in the classroom.