Organic Chemistry I Syllabus, Fall 2015

3 credit hours

Course ID: 001462  
Time: MWF 7:30 AM – 8:20 AM

Course Number: 83646  
Location: HEC 125

Instructor: Dr. Yulia Gerasimova  
E-mail: Yulia.Gerasimova@ucf.edu

Office hours: CHM 333, MWF 11:00 AM – 1:00 PM

Textbook:

Supplementary Materials:
Molecular Model Kit

Course objectives and coverage
This is the first part of Organic Chemistry course. It covers the nomenclature, properties, synthesis and reactions of aliphatic and cyclic alkanes, alkenes and conjugated dienes, alkynes, alkyl halides, alcohols, ethers, epoxides, thiols and sulfides.

The objectives of the course are: (i) to understand steric and electronic properties of chemical bonds in the studied organic molecules; (ii) to learn the rules for molecular representation and nomenclature of the studied molecules; (iii) to learn how to predict the reactivity of the studied molecules and reaction mechanisms for organic transformations; (iv) to learn how to synthesize simple organic molecules.

It is assumed that students are familiar with the concept studied in General Chemistry I and II.

Course outline
The course will cover Chapters 1-14 of the textbook. It is divided into four modules, with a Midterm Exam at the end of each module. Mastering of the material from Chapter 14 will be only tested at Final Exam.

Module I
Ch 1. A review of General Chemistry
Ch 2. Molecular representations
Ch 3. Acids and Bases
Ch 4. Alkanes and Cycloalkanes

Module II
Ch 5. Stereoisomerism
Ch 6. Chemical Reactivity and Mechanisms
Ch 7. Substitution reactions

Module III
Ch 8. Alkenes: Structure and Preparation via Elimination Reactions
Ch 9. Addition Reaction of Alkenes
Ch 10. Alkynes
Module IV
Ch 11. Radical Reactions
Ch 12. Synthesis
Ch 13. Alcohols and Phenols
Ch 14. Ethers and Epoxides; Thiols and Sulfides

Grading policy¹

Letter grades will be assigned based on cumulative scores for nine (9) quizzes plus a syllabus quiz, three (3) Midterm Exams, and a Final Exam (see the Table below). Quizzes and exams are close book tests.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Points</th>
<th>Percent of Final Grade</th>
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</thead>
<tbody>
<tr>
<td>Syllabus Quiz</td>
<td>10 pts</td>
<td>1%</td>
</tr>
<tr>
<td>Quizzes (Best 9 out of 11)</td>
<td>20 pts each, 180 pts total</td>
<td>18%</td>
</tr>
<tr>
<td>Midterm Exams (Best 3 out of 4)</td>
<td>170 pts each, 510 pts total</td>
<td>51%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>300 pts</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1000 pts</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

Grading scale:

- A 90–100 %
- B 80–89 %
- C 70–79 %
- D 60–69 %
- F 0-59 %

However, this scale is only a guide and may vary during the term.

1. **Quizzes** (2% each, 18% total, two quizzes may be dropped).

There will be eleven (11) free-response quizzes offered either at the end of the lecture (for 10-15 minutes) or on-line (through Webcourses). In class quizzes will typically contain 2-3 problems from the studied textbook chapters. Quizzes will be accepted only if turned in before 8:20 AM on the quiz day. On-line quizzes will be multiple choice questions. The lowest two quiz scores will be dropped. No make-up quizzes will be given.

A syllabus quiz will be offered on-line on Webcourses@UCF as the Academic engagement quiz.

2. **Midterm Exams** (17% each, 51% total, one exam may be dropped).

There will be four (4) Midterm Exams. Midterm exams will focus on the material from the chapters studied in the Module. The exams will be a combination of multiple choice and free-response questions. The scores for midterm exams will be adjusted based on the best

¹ The instructor reserves the right to modify the schedule, the testing procedure, and the grading basis if, in the professional judgment of instructor, such modification is in the best interest of fulfilling the course objectives and assuring the academic integrity of the course and the institution. You are responsible for announcements made during lectures and/or through electronic communication (i.e. Webcourses@UCF, email)
performance in the class: best score is the new 100%. The lowest one (1) Midterm Exam score will be dropped. No make-up exams will be given.²

Midterm Exams Schedule:³

- Exam I – Monday, September 14th, 7:30 AM – 8:20 AM;
- Exam II – Monday, October 5th, 7:30 AM – 8:20 AM;
- Exam III – Monday, October 26th, 7:30 AM – 8:20 AM;
- Exam IV – Monday, November 23rd, 7:30 AM – 8:20 AM

3. **Final exam** (30%).

The final will be comprehensive. The scores for the final exam will be adjusted based on the best performance in the class: the best score is the new 100%.

The final exam is scheduled on **Monday, December 14th, 7:00 AM - 9:50 AM**

**Webcourses.**

Announcements, lecture content and scoring will be posted for your use on Webcourses@UCF, which is an online course management system. You can access Webcourses through my.ucf.edu.

**Financial Aid Requirement**

According to UCF requirements, all faculty are required to document students’ academic activity at the beginning of each course. In order to document that you began this course, please complete the **Academic engagement quiz** on Webcourses@UCF by the end of the first week of classes (Friday, August 28, 2015 by 5:00 pm EDT) or as soon as possible after adding the course. Failure to do so may result in a delay in the disbursement of your financial aid. The Academic engagement quiz will have a score of 1% (10 pts).

**Academic dishonesty**

UCF policies regarding honesty will be strictly enforced on all exams, quizzes and assignments. Violators will receive a grade of “F”. For description of what constitutes academic dishonesty, please refer to p. 43 of the UCF student handbook (http://www.goldenrule.sdes.ucf.edu/)

**Accommodation of students with disabilities**

The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities. Students who need accommodations must be registered with Student Disability Services, Student Resource Center Room 132, phone 407-823-2371, TTY/TDD only phone 407-823-2116, before requesting accommodations from the professor.

**Supplemental Instruction and Tutoring:** Student Academic Resource Center (SARC) located in Phillips Hall, Rm 115 (Phone 407.823.5130, http://www.sarc.sdes.ucf.edu). Provides a series of weekly study sessions (SI sessions), as well as free tutoring to students enrolled in UCF courses. Additional Help Sessions from the instructor will be possible before the Midterm Exams (time and place will be additionally announced).

**No classes:** September 7; November 11, and 27

² The first Midterm Exam that you miss for any reason will be your dropped score. If you miss a second Midterm Exam, and have a legitimate reason (e.g. doctor’s note, university sanctioned events, court appearance, etc.), this score will be replaced by your Final Exam score.