Organic Chemistry II Syllabus, Fall 2016
3 credit hours

**Course ID:** 001464

**Time:** TR 4:30 PM – 5:50 PM

**Course Number:** 90117

**Location:** VAB 132

**Instructor:** Dr. Yulia Gerasimova

**Phone:** 407-823-2693

**E-mail:** Yulia.Gerasimova@ucf.edu

**Office hours:** PSB 246, MWF 1:00 PM – 2:00 PM; TR 1:30 PM – 3:00 PM (or by appointment)

**Required Textbook and Materials:**

**Supplementary Materials:**

**Course objectives and coverage**

This is the continuation of Organic Chemistry I course. It covers spectroscopy; properties and reactions of conjugated \( \pi \) systems, aromatic compounds, aldehydes and ketones, carboxylic acids and their derivatives, enols and enolates, and amines.

The objectives of the course are: (i) to understand principles of IR, NMR and UV-VIS spectroscopy and mass-spectrometry and to learn how to use these methods to characterize organic compounds and study their transformations; (ii) to learn properties and reactivity of the studied classes of compounds; (iii) to learn how to propose synthetic schemes for the studied organic molecules.

It is assumed that students have mastered the concept studied in Organic Chemistry I.

**Course outline**

The course will cover Chapters 15-23 of the textbook. Selected topics from Chapters 24-26 will be covered if time permits.

The course is divided into five modules, with a Midterm Exam at the end of each module.

---

**Module I**

Ch 15. Infrared Spectroscopy and Mass Spectrometry
Ch 16. NMR Spectroscopy

*Exam I*

**Module II**

Ch 17. Conjugated \( \pi \) Systems and Pericyclic Reactions

*Exam II*

**Module III**

Ch 18. Aromatic Compounds
Ch 19. Aromatic Substitution Reactions

*Exam III*
Module IV
Ch 20. Aldehydes and Ketones
Ch 21. Carboxylic Acids and Their Derivatives
Exam IV

Module V
Ch 22. Enols and Enolates
Ch 23. Amines
Exam V
Selected Sections of Chapters 24-26.
Final Exam

Grading policy

Letter grades will be assigned based on cumulative scores for fourteen (14) quizzes plus a syllabus quiz, Sapling homework score, 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>
</tr>
</thead>
<tbody>
<tr>
<td>Orgo I Review Quiz</td>
<td>10 pts</td>
<td>1%</td>
</tr>
<tr>
<td>Online Quizzes (9)</td>
<td>10 pts each, 90 pts total</td>
<td>9%</td>
</tr>
<tr>
<td>Midterm Exams (Best 4 out of 5)</td>
<td>150 pts each, 600 pts total</td>
<td>60%</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** (1% each, 10% total).
   There will be nine (9) multiple-choice quizzes offered online (through Webcourses). Each quiz will test students’ mastery of a covered chapter material. No make-up quizzes will be given. An Orgo I review quiz will be offered on-line on Webcourses@UCF in the beginning of the semester and will be used to document students’ academic activity.

2. **Midterm Exams** (15% each, 60% total, the score for one exam may be dropped).

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)
There will be five (5) 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 lowest one (1) Midterm Exam score will be dropped. No make-up exams will be given.²

Midterm Exams Schedule:
- Exam I – Thursday, September 8th, 4:30 PM – 5:50 PM;
- Exam II – Thursday, September 22nd, 4:30 PM – 5:50 PM;
- Exam III – Thursday, October 13th, 4:30 PM – 5:50 PM;
- Exam IV – Thursday, November 3rd, 4:30 PM – 5:50 PM;
- Exam V – Tuesday, November 22nd, 4:30 PM – 5:50 PM

3. Final exam (30%).

The final will be a standardized multiple-choice test designed by the American Chemical Society. It will include topics from both CHM 2210 and CHM 2211. A pink scantron form is required for the final exam.

The score for the Final exam can replace the score for any of the Midterm Exams.

The final exam is scheduled on Thursday, December 8th, 4:00 PM - 6:50 PM

Homework

Homework composed of selected end-of-the-chapter problems from the textbook is assigned for your benefit and will not be collected or graded. The list of problems will be posted on Webcourses. It is highly recommended to do the homework regularly and work through the problems for understanding rather than memorization. Similar or identical problems may appear on quizzes or tests.

Extra Credit

Five (5) in-class quizzes will be offered as extra credit assignments a week after each Midterm Exam. These quizzes will contain 2-3 problems similar to the problems of the online quizzes and Midterm Exams from the correspondent module. Quizzes will be accepted ONLY if turned in BEFORE 5:50 PM on the quiz day. The extra credit quizzes will be announced in class one lecture in advance. NO MAKE-UP extra credit quizzes will be given.

Keys to Succeed in the Course

- Read the material from the textbook BEFORE it is covered in class and prepare questions to ask.
- Work on practice problems from the textbook on a daily basis. The more problems you do, the better your grade is.
- Take all assignments.
- Review your tests/quizzes to see your mistakes. Work on the missed concepts again.
- Do not hesitate to ask questions, either in class of talk to the instructor.

² The first Midterm Exam that you miss for any reason will be your dropped score. If you miss a second Midterm Exam, this score will be replaces by your Final Exam score.
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 Orgo I review on Webcourses@UCF by the end of the first week of classes (Friday, August 26, 2016 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 quiz will have a score of 1% (10 pts) toward your final grade.

Academic dishonesty
UCF policies regarding honesty will be strictly enforced on all exams 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).

Graduate students of the Chemistry Department also offer free tutoring service. The schedule will be posted on Webcourses.

No classes: November 24