CHEM231 – Organic Chemistry I  
Sections SEF1, SEF2  
Fall 2015

Dr. W. Chris Hollinsed      Office Hours:  
chollins@umd.edu       Generally available prior to class  
(610) 389-1397        or by appointment

LECTURES:  
M 6:30 p.m. – 9:30 p.m. CHM 1402

SECTIONS:  
SEF1 W 6:30 p.m. – 7:20 p.m. CHM 1224  
SEF2 W 6:30 p.m. – 7:20 p.m. CHM 1228

TEACHING ASSISTANTS:  
SEF1: Deen Aivaz maivaz@.umd.edu  
SEF2: Nikki Pedowitz npedowit@umd.edu

INTRODUCTION

Chemistry 231 is the first half of a two semester introduction to organic chemistry sequence. Material presented will cover the three main areas of organic chemistry:

- **Structure and Bonding in Organic Chemistry** (How do these molecules assemble and what effect does this have on their physical properties?)
- **Synthetic Organic Chemistry** (If we know what structure we want, how can we make it?)
- **Reaction Mechanisms of Organic Compounds** (What effect do structure, bonding and reaction conditions have on the specific course of an organic reaction?)

We will cover these only on a limited set of compound classes. The remainder of these compound classes will be covered in the second semester of the course.

Because of the special nature of this course, we only have one evening each week in which to cover the material. We have 15 Chapters to cover in the textbook and 14 weeks of class. We will therefore have to cover at least one chapter each week.

I will make every effort to manage both your and my energy and stamina with a 10 minute break at about 7:50 pm every class. Many of you will be coming to class after a full day of some other activity. Please manage your energy so that you can be fully present and awake in class.

In addition, we need to have 3 one-hour exams which will comprise the bulk of your grade. These will, of necessity, take place during normal class time.
immediately followed by a somewhat abbreviated lecture. There will in any case be sufficient time to cover all the material.

Many of you are taking the course with the plan to ultimately take a professional admissions exam such as the MCAT. It is part of the aim of this course to ensure that you are adequately prepared to perform well on such an exam.

**TEXT AND OTHER MATERIALS**

The text we will use for this course is:


Required: An access code for OWLv2 for online homework assignments.

Recommended but not required: David Klein, Organic Chemistry 1 as a Second language.

Highly recommended: Molecular model set

I will use Canvas / ELMS for entering grades, e-mailing the class, posting exams (the ones given this semester as well as old exams for practice), answer keys, recommended problems, and other course documents. You can log on to the course Canvas / ELMS page by going to http://elms.umd.edu. The login and password are the same ones you use for your university e-mail.

**GRADING**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points for Each Assignment</th>
<th>Number of Assignments</th>
<th>Total points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>10 points (drop lowest 2)</td>
<td>10 quizzes</td>
<td>100 points</td>
</tr>
<tr>
<td>Exams</td>
<td>100 points</td>
<td>3 exams</td>
<td>300 points</td>
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<tr>
<td>Final Exam</td>
<td>200 points</td>
<td>1 exam</td>
<td>200 points</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
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<td><strong>600 points</strong></td>
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Grading (Normalized to 100%): A+ ≥ 97%, A 93-97%, A- 90-93%, B+ 87-90%, B 83-87%, B- 80-83%, C+ 77-80%, C 73-77%, C- 70-73%, D+ 67-70%, D 63-67%, D- 60-63%, F <60%. These are guidelines and I reserve the right to adjust these based on other attributes of your performance in the course. I usually decide to do +/- grades or whole letter grades based on how many students will benefit the most from each system.

**HOMEWORK:** Will be online. I am still figuring out the details. The one consistent criticism I have received is that there are not enough opportunities to
do problems in the class, this will provide another way to get the needed practice. I or your teaching assistant will be able to help you with any problems that are troublesome or confusing.

**QUIZZES:** There will be a short quiz at the beginning of each class (Including the first class!). These are primarily for understanding how well both you and I are making progress in the class. There will be roughly 10 of these at 10 points each. I will drop the two lowest grades before calculating the total. The score will be normalized so that it is equivalent to an hour exam.

**EXAMS:** The in-class exams are scheduled as follows:

- Exam 1, Chapters 1-5, October 12, 2015
- Exam 2, Chapters 6-9, November 9, 2015
- Exam 3, Chapters 11-14, December 7, 2015

The final exam is tentatively scheduled for May 18th from 6:30 p.m. - 8:30 p.m. in a location to be determined. When this information is confirmed, I will make multiple announcements in class and put an announcement on the Canvas / ELMS page. This information is usually posted on the Final Exam page of Testudo as well.

Only non-programmable calculators will be allowed during the exams. A scientific calculator is strongly recommended. No electronic devices (other than your calculator) will be permitted during an exam. Each student is required to keep his/her University of Maryland photo ID on the desk during the exam. If you know you will have a conflict with the date of an exam, such as religious observances, you must be in touch with me by the end of schedule adjustment (September 14th). If you are ill on the day of the exam, you must contact me before the exam to make alternative arrangements. An e-mail or voice mail message PRIOR to the exam time will suffice. Make up exams will be given only with a valid documented University excuse.

### TENTATIVE COURSE SCHEDULE:

<table>
<thead>
<tr>
<th>Date</th>
<th>Chapter</th>
<th>Lecture Topic</th>
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</thead>
<tbody>
<tr>
<td>8/31</td>
<td>1</td>
<td>Course overview; Review Structure and Bonding</td>
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<tr>
<td>9/7</td>
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<td>Labor Day – No class</td>
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<tr>
<td>9/14</td>
<td>2</td>
<td>Alkanes and Cycloalkanes</td>
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<td></td>
<td></td>
<td><em>Last day for Schedule Adjustment</em></td>
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<tr>
<td>9/21</td>
<td>3</td>
<td>Stereochemistry</td>
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<tr>
<td>9/28</td>
<td>4</td>
<td>Acids and Bases</td>
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<tr>
<td>10/5</td>
<td>5</td>
<td>Alkenes: Bonding, Nomenclature &amp; Properties</td>
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<tr>
<td>10/12</td>
<td>6</td>
<td><strong>Exam 1;</strong> Mechanisms; Reactions of Alkenes</td>
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<tr>
<td>10/19</td>
<td>7</td>
<td>Alkynes</td>
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<td>Date</td>
<td>No.</td>
<td>Topic</td>
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<tr>
<td>10/26</td>
<td>8</td>
<td>Halides</td>
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<tr>
<td>11/2</td>
<td>9</td>
<td>Nucleophilic Substitution and $\beta$-Elimination</td>
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<td>11/9</td>
<td>10</td>
<td>Exam 2; Alcohols</td>
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<td></td>
<td>11/9</td>
<td><em>Last day to withdraw with a &quot;W&quot; Grade</em></td>
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<tr>
<td>11/16</td>
<td>11</td>
<td>Ethers, Epoxides and Sulfides</td>
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<td>11/23</td>
<td>12,14</td>
<td>Infrared Spectroscopy, Mass Spectrometry</td>
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<td>11/30</td>
<td>13</td>
<td>Nuclear Magnetic Resonance Spectroscopy</td>
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<tr>
<td>12/7</td>
<td>15</td>
<td>Exam 3, Organometallic Compounds, Q&amp;A &amp; Review</td>
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<tr>
<td>12/14</td>
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<td>Final Exam</td>
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**POLICIES:**

**ACADEMIC INTEGRITY**: The University of Maryland has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student, you are responsible for upholding these standards for this course. You should be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit the Student Honor Council website at http://www.studenthonorcouncil.umd.edu/whatis.html.

You are responsible for understanding the content of the Code and behaving in a manner consistent with the Code. There will be zero tolerance for any violations.

**MAKE-UP EXAMS**: Only university-excused absences will be accepted for missed exams. Proper documentation is expected. You must contact me within 24 hours of the missed exam. Failure to meet these three requirements results in a ZERO for the missed exam.

**DSS ACCOMMODATIONS**: If you have a disability or other documentation from Disability Support Services, please make an appointment to discuss available accommodations to maximize your experience in this course. Learning disabilities must be documented by DSS prior to receiving accommodations.

**WITHDRAW**: The last day for schedule adjustments is September 14th. The last day to withdraw is November 9th.

**RE-GRADERS**: In the event that you feel that points were unfairly deducted from your exam, regrades are permissible for up to one week from the date the exam is handed back, or the date the answer key is available, whichever is later. **On a separate sheet of paper**, write an explanation of where and why you feel that you deserve more points than you were given credit for – do NOT write directly on
the exam. Regrades are to be submitted directly to me. Exams with the answers written in pencil will not be regraded.

At my discretion, I may decide to regrade your entire exam.

Neither the TA nor I will discuss with you whether or not you should submit a regrade.

Addition errors that unfairly subtracted points from your exam score will be corrected, but not regraded.

**GRADES IN GENERAL:** Ultimately, it is your responsibility to make sure that your grades are recorded correctly in the gradebook on Canvas / ELMS, and that they remain in order throughout the semester. Errors in grades (either regrades or a mis-entered grade on Canvas / ELMS) should be brought to my attention immediately – please note that there is a statute of limitations on regrades as described above. You should check Canvas / ELMS often to make sure your scores appear as they should. After the date of the final exam, I will not entertain exam regrades (as per the section above).

**ASSISTANCE:**

I am available for help with and or discussion about any aspect of this course. Unfortunately, I am not available before class since I will usually becoming to College Park from another campus. I do not have a permanent office on campus so we will have to agree where to meet. All that said, I will do my best to accommodate any student that would like to meet with me by appointment or other prior arrangement.

It is my intention to make my self as available as you need me to be in order to provide the support you need for understanding the material. For logistical issues please look at the syllabus first.

You are free to e-mail (Please send emails directly to chollins@umd.edu rather than sending messages through CANVAS/Elms) me a question, call me, or make an appointment to meet with me outside of designated office hours if you cannot make my regular office hours, or if you choose to do so. At any rate, finding me for help during the semester should not be a problem.

Staying on top of the material is an important duty that you must do in order to do well in this course. Once you feel you are beginning to lag behind or get lost, I would encourage you to meet with me as soon as possible so we can get you back up to speed. Not doing so may affect your grade in an undesired manner, as well as your performance in the next semester’s class.

**OTHER SUGGESTIONS:**
• Add my e-mail address (on the top of the first page of this syllabus) to your whitelist/list of preferred senders. U.Md. addresses have been used to spam some hotmail and Gmail accounts recently, so some valid messages from the umd domain may be blocked. If I am on your whitelist, messages from me will not be blocked. This is particularly important if your umd address automatically forwards to a Gmail or hotmail account.

• Attend all lectures – If you choose not to do so, you will not hear my lectures. I may explain things in the textbook in a different way or provide alternative methods for working problems or understanding a concept. Occasionally, I may teach something that is not in the book. If it is covered in class, it is fair game for an exam. It is in your best interest not to miss lectures.

• Go to your discussion sections – Your discussion sections will be smaller than the lectures and are places where you can get your questions addressed in a more personal manner (although I will answer questions during lecture). The point of the discussion section is to fill in the gaps in the material that the lectures leave, to help you better understand the material from lecture, and to practice problems related to the lecture material.

• Work the assigned end of chapter problems – These are problems that I feel are a good way to verify your understanding of lecture and textbook material. There are far too many to do considering your other classes and assignments, but nonetheless, working on a healthy number of these per chapter will reinforce your understanding of the material.

• Get help the minute you begin to have trouble with the material. This course is not only a course in and of itself, but it is also preparation for CHEM241, Organic Chemistry II. Any difficulties you have with the material in this course may lead to disastrous consequences in CHEM241. Your TA and I are here to help you learn and to prepare you for your future chemistry courses, so take advantage of us!!!