Instructor: Dr. Dana Lashley
Email: DLashley@wm.edu
Office: ISC 1039B
Office hours: Mon 11.00am-noon and 2.30-3.30pm, Wed 11.00am-noon or by appointment

Required materials:
1. Access to Sapling Learning for Homework (around $40, purchased online)
2. nclass - an app used for real time interactions, live quizzes and attendance. ($8.99 purchased online)

Recommended materials:
4. Molecular Visions Organic Model Set, Darling - may be used during tests.

Course Objective: Organic Chemistry 1 is an introduction to the structure, nomenclature, properties and reactivity of organic molecules. Modern views of chemical bonding will be used to investigate these principles. As the course proceeds we will discuss simple organic reactions and their mechanisms as well as analytical techniques to elucidate the structures of organic molecules (Spectroscopy).

Contact: You should always feel free and comfortable to contact me with any questions or concerns. Visit me in my office hours (listed above) or shoot me an email to schedule an appointment. You are NEVER bothering me!

Smart phones / tablets: You may use smart phones and tablets in class during lectures. Most of you have this technology available and you can use it to easily access course material. I trust that you will use them responsibly for class-related issues. You may not use them during exams and quizzes. I just ask that you be respectful about it and please do keep your phones on silent.
Blackboard: Course related materials such as lecture templates/notes, exam keys and announcements will be posted on Blackboard (www.blackboard.wm.edu).

Real-time classroom communication tool: We will use an app called nClass to conduct realtime polls, quizzes and manage discussions. The app allows both anonymous and non-anonymous responses and will enrich your classroom experience. You can use the nClass mobile app (Apple, Android) or website using your smartphones/tablets or laptops. We will also take class attendance with nClass.

The cost associated with this app is $8.99 for 6 months.

Note: This fee will cover multiple courses that use nClass app during this time period.

New nClass users will receive a 15 day trial period. If you have already used nClass in a previous semester, then you will not receive another trial period for this semester. You can pay for the subscription via https://www.nclassweb.com

Nclass activities:
1. Attendance: Counts toward your grade (40 pts total). Tracked daily.
2. Quizzes: Count toward extra-credit (20 pts total, 5 pts each Quiz). Four times this semester on dates listed on the schedule below.

Sign-up instructions can be found at the end of this syllabus

Review Sessions: Weekly Help-Session will be held on Monday evenings. Exact time to be determined via class poll to decide what time works best for the majority. Help sessions are not mandatory but highly recommended. Homework assignments and exams will be reviewed and course content clarified upon request. You will have the chance to ask many questions and work on handed out problem-sets. Additional Help-sessions may be offered before exams (typically on Sundays). Time and location for these will be announced in class and via email.

Class Attendance: In accordance with College policy, class attendance is expected and will be tracked using nclass. Attendance will be recorded daily and a total of 40 points will be awarded for attendance. See undergraduate catalog (p.42) for more information. Please notify me of any absences by email.

Student Accessibility Services: Students with disabilities must contact the Student Accessibility Services in the Dean of Students office to arrange for special accommodations or extra-time during exams.

Honor Code: All students are bound to the Honor Code. There will be zero tolerance for cheating and all incidences will be reported to the honor system. See the student handbook for more information on the honor code.
Final grade:

<table>
<thead>
<tr>
<th>Graded Coursework</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>200</td>
</tr>
<tr>
<td>Exam 2</td>
<td>200</td>
</tr>
<tr>
<td>Exam 3</td>
<td>200</td>
</tr>
<tr>
<td>Attendance</td>
<td>40</td>
</tr>
<tr>
<td>Homework (8x 20 pts)</td>
<td>160</td>
</tr>
<tr>
<td>Final</td>
<td>400</td>
</tr>
<tr>
<td>Quizzes (3x 5pts)</td>
<td>15 extra credit</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1200 (+15 extra credit)</strong></td>
</tr>
</tbody>
</table>

The maximum amount of points you can achieve in the course are 1200. Your final grade will be determined by the sum of your points throughout the semester in the following scale:

A-/A  90-100%;  B-/B/B+  80-89.99%;  C-/C/C+  70-79.99%;  D-/D/D+  60-69.99%

For example, the minimum amount of points required for an A are 90% of 1200 points =1080 points.

**Hour exams:** There will be three (3) hour exams, each worth 200 points. They will be taken during regular class hours. Dates for the exams are shown in the schedule below and are subject to change.

**Quizzes:** These will be administered using the nclass app. The quizzes will take place on during class time and count toward extra-credit. (see extra-credit below)

**Extra credit:** The biggest opportunity for extra-credit will be quizzes administered live in class using nclass at the beginning of class on the dates listed in the schedule. There will be 3 extra credit quizzes worth 5 points each for a total of 15 points. These quizzes will take place about half-way between exams and are meant to inspire you to study material consistently and not just before exams when it can get quite overwhelming.

Additionally, there can be extra credit problems on some exams.

**Final examination (firm date) will be a comprehensive final:**
Tuesday, May 2nd, 7.00pm - 10.00pm.
There will be NO EARLY FINAL EXAM... plan your schedule (for example travel, jobs, vacation) now to accommodate the day and time for the final exam.

**General information for exams:** All examinations and quizzes MUST be taken in ink. No pencil!!! There will be a deduction of 2 points for use of pencil and no regrades.

**Re-grades:** All grading concerns need to be discussed with me within 3 class days upon receiving your graded exam. After that there will be no re-grades.
**Make-up work:** Exams, homework and other graded work cannot be easily made-up. See me in the event of extenuating circumstances.

Note: Extra-credit quizzes cannot be made up!

**Important dates:**
First day of Class is Wednesday, January 18th
Add/drop ends on Friday, January 27th.
Last day to withdraw from this course is Friday, March 17th.
Last day of Class is Friday, April 28th.
Final Exam is on Tuesday, May 2nd, 7.00pm - 10.00pm.

Exam, Quiz and homework due dates are found in the schedule further below
Homework assignments: Homework will consist of graded and ungraded assignments. It is IMPERATIVE for success in this class to do both graded AND ungraded homework. If you only do the graded Sapling homework, you are doing just the bare minimum. You can pass the class that way but to get an A or a B you must practice way beyond the bare minimum. Set yourself aside several hours per week to practice problems. Solving as many problems as possible is really the only way to master organic chemistry.

Graded homework assignments will be done using SAPLING. You have to purchase access for the semester. The costs are around $40 for online purchase and $48 in the WM bookstore. There will be ten (10) SAPLING homework assignments. Although scored on a 100 point scale, each problem-set will be worth 20 points. The lowest two assignments will be dropped (so only eight (8) will be graded), for a maximum total of 160 points. Assignments are due at 11.55 pm on the dates announced in class and via email. To sign up for SAPLING go to http://saplinglearning.com/ and follow the instructions provided on the handout further below.

Ungraded homework assignments from your textbook, are assigned to help you prepare for exams. Your textbook has in-chapter and end-of-chapter problems. You should do ALL in-chapter-problems as you read along the textbook. The end-of-chapter problems that I am assigning to you can be found below for the Brown Textbook. For the Klein Textbook I will send you regular emails with assignments. Additionally, supplemental problems may be posted on blackboard or handed out during help-sessions.

Suggested Problems from Brown Textbook: Problem working is essential to learning organic chemistry! Below are some selected problems from the end of each chapter in your book. These problems will not be collected or graded, but working them in addition to the Sapling problem sets is strongly suggested. Problem numbers shown in bold represent challenge problems that will test your mastery of the chapter material. Mastery means that you can apply the concepts you’ve learned to new and unfamiliar material.

Suggested Problems from Klein Textbook: Will be announced throughout the semester (in class and via email).
Schedule:

You will find a tentative schedule below. This schedule is subject to change. The chapters indicated are from “Organic Chemistry” by Brown, Iverson, Anslyn and Foote 7th Ed.

Tentative Schedule - Subject to change

<table>
<thead>
<tr>
<th>Topics</th>
<th>Chapter (Sections)*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Structure and Bonding</strong>, Functional Groups</td>
<td>1 (1.1 - 1.4) (1.5 - 1.10)</td>
</tr>
<tr>
<td>Polarity, Resonance, Molecular Orbital Theory</td>
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<tr>
<td><strong>Acids and Bases</strong></td>
<td>4 (4.1 - 4.7)</td>
</tr>
<tr>
<td><strong>Alkanes and Cycloalkanes:</strong></td>
<td>2 (2.1 - 2.2) (2.3 - 2.9)</td>
</tr>
<tr>
<td>Nomenclature, Isomerism, Conformations, Geometrical Isomers, Properties and Reactions,</td>
<td></td>
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<tr>
<td><strong>EXAM 1: Wednesday, February 22</strong></td>
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<tr>
<td><strong>Stereochemistry</strong></td>
<td>3 (3.1 - 3.9)</td>
</tr>
<tr>
<td><strong>Alkenes:</strong></td>
<td>5 (5.1 - 5.4)</td>
</tr>
<tr>
<td>Structure, Nomenclature &amp; Properties</td>
<td></td>
</tr>
<tr>
<td><strong>Substitution and Elimination</strong></td>
<td>9 (9.1 - 9.9)</td>
</tr>
<tr>
<td><strong>EXAM 2: Wednesday, March 29</strong></td>
<td></td>
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<tr>
<td><strong>Spectroscopy:</strong></td>
<td>13, 12 (13.9 - 13.12, 12.1 - 12.5)</td>
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<tr>
<td>NMR Spectroscopy, IR Spectroscopy</td>
<td></td>
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<tr>
<td><strong>Alkene reactions:</strong></td>
<td>6 (6.1 - 6.7)</td>
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<tr>
<td>Reaction Mechanisms (Primer 1, p.213)</td>
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<tr>
<td>Alkene Reactions including Stereoselectivity and Regioselectivity</td>
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<tr>
<td><strong>EXAM 3: Friday, April 21</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Alkynes:</strong></td>
<td>7 (7.1 - 7.9)</td>
</tr>
<tr>
<td>Nomenclature, Reactions</td>
<td></td>
</tr>
<tr>
<td><strong>Alkyl Halides and Radical Reactions</strong></td>
<td>8 (8.1 - 8.6, 8.8)</td>
</tr>
<tr>
<td><strong>FINAL EXAM: Tuesday, May 2nd, 7.00pm - 10.00pm.</strong></td>
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</tbody>
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**Quizzes:** (Extra-credit 5pts each)
- Quiz 1: Wednesday, February 8
- Quiz 2: Wednesday, March 22
- Quiz 3: Wednesday, April 12

**Graded Homework on Sapling:**
Expect one assignment per week. Dates will be announced in class and via email. All assignments are due at 11.55pm of the due day.
Instructions for SAPLING enrollment: (Costs ~ $40)

1. Go to http://saplinglearning.com and click on your country ("US Higher Ed") at the top right.

2a. If you already have a Sapling Learning account, log in and skip to step 3.

2b. If you have Facebook account, you can use it to quickly create a Sapling Learning account. Click the blue button with the Facebook symbol on it (just to the left of the username field). The form will auto-fill with information from your Facebook account (you may need to log into Facebook in the popup window first). Choose a password and timezone, accept the site policy agreement, and click "Create my new account". You can then skip to step 3.

2c. Otherwise, click the "Create an Account" link. Supply the requested information and click "Create My Account". Check your email (and spam filter) for a message from Sapling Learning and click on the link provided in that email.

3. Find your course in the list (you may need to expand the subject and term categories) and click the link. College of William and Mary - CHEM 206 - Spring17 - LASHLEY

4. If you are new to Sapling Learning familiarize yourself with the training materials and tutorials. There is 5 points of extra-credit for doing the training.

Once you have registered and enrolled, you can log in at any time to complete or review your homework assignments. During sign up or throughout the term, if you have any technical problems or grading issues, send an email to support@saplinglearning.com explaining the issue. The Sapling Learning support team is almost always faster and better able to resolve issues than your instructor.

Instructions for nclass enrollment: (Costs $8.99)

1. Download the nClass app to your device from your app store (Apple App Store or Google Play)

2. Open the app or alternatively go to https://www.nclassweb.com and sign-up using your school email address. You must use your school email address as that is the email address I will be using to register you.

3. Set a password and optionally upload a photo.

4. Open the app on your mobile device (or on your browser) and get familiar with the interface. Once I have registered you, you will see the course ORGANIC CHEMISTRY 1 listed after login.

5. You can pay for the subscription via https://www.nclassweb.com