

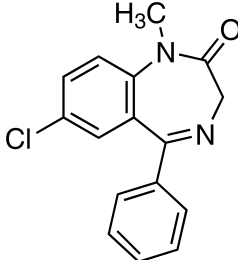
The College of William and Mary

CHEM 207- Summer 2018

2.30pm, MTWRF, ISC 1280

Organic Chemistry II

for Life Science Majors



Instructor - Dr. Dana Lashley

Office - ISC 1052

Email - DLashley@wm.edu

Office hours: by appointment. Please don't hesitate to email me !

Mandatory materials: **Workbooks** (price varies ~ \$30 - \$50), **Sapling** online homework (\$40) and Poll Everywhere (free) are the only mandatory materials. See details below.

Workbook (mandatory): "[Organic Chemistry as a Second Language](#)" 4th edition, by **Klein**

- [First Semester Topics](#) (ISBN: 978-1-1191-1066-8) AND

- [Second Semester Topics](#) (ISBN 9781119110651)

These are TWO different books and you need both!

Textbook (optional): "[Organic Chemistry](#)", 7th (or 8th edition), by **Brown**, Iverson, Anslyn & Foote (ISBN: 978-1-1339-5284-8). A study guide bundle with [solution manual](#) (ISBN: 978-1-2850-5261-8) as well as a model kit (ISBN: 978-0-6693-9912-7) are also available but not mandatory. You can use model kits in exams if you like, but they are not required. [Both this textbook and the solutions manual are on reserve for check-out at SWEM library \(2h at a time\).](#)

Course Objective: Building upon the foundation you acquired in Chem 206 you will be introduced to a series of more advanced topics. You will explore the chemistry and reactions as well as the interconversions of various functional groups. Reaction mechanisms, which explain why reactions occur in a certain way, will be emphasized. Organic molecules form the basis of living species on our planet. Once we have investigated the principles that control the properties of such molecules, this course will travel from simple organic molecules to complex biomolecules such as carbohydrates, proteins and DNA.

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.

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 response (mandatory): We will use an app called *Poll Everywhere* to conduct dynamic polls and quizzes in the classroom using your smartphones/tablets or laptops. **This app is free !** We will also take daily class attendance with Poll Everywhere. These activities count toward your grade. Instructions for obtaining this app are included further below.

Review Sessions: Help sessions will be scheduled before exams. Time and location will be announced in class and via email. 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. The time for the sessions will be determined by a poll to see when most of you are available.

Final grade:

Graded Coursework	Points
Exam 1*	200
Exam 2*	200
Exam 3*	200
Final	400
Quizzes (4x 50 pts)*	200
Homework (9 x 20 pts)	180
Attendance	20
Total (minus lowest 200)	1200

* can be dropped

Your lowest 200 points, stemming from either one of the hour exams or from all the quizzes combined will be dropped. You cannot drop the final examination or the homework grade.

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%

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: There will be four (4) quizzes, each worth 50 points. These will be taken during the regular class periods (12 minutes or so at the beginning of class). Dates for quizzes are shown in the schedule below and are subject to change.

Final examination (firm date) will be a comprehensive final:

Friday, June 29th, 2 pm - 5 pm. 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 are to be taken **in ink.**

No pencil!!! There will be a **deduction of 2 points** for use of pencil and no regrades.

Grading concerns/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.

Extra credit: Please see separate handout on extra-credit opportunities.

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 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.

This is really the only way to master organic chemistry !

Graded homework assignments will be done using **SAPLING (mandatory)**. 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 twelve (12) SAPLING homework assignments. Although scored on a 100 point scale, each problem-set will be worth 20 points. **The lowest three** assignments will be dropped, and your **highest nine** (9) assignments will count for a maximum total of 180 points. Assignments are due at 11.55 pm on the dates shown in the schedule below. The dates are subject to change and any changes to the schedule will be 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 workbook and textbook, are assigned to help you prepare for exams.

Klein Workbook: Homework problems for each exam can be found on separate homework handout.

HIGHLY recommend doing !

Brown Textbook: Homework problems for each chapter can be found on separate homework handout. This book has in-chapter and end-of-chapter problems. You should do ALL in-chapter-problems if you choose to read along the textbook.

Additionally, supplemental problems may be posted on blackboard or handed out during help-sessions.

Class Attendance: In accordance with College policy, class attendance is expected and will account for a small amount of your grade.

See undergraduate catalog for more information. Please notify me of any absences by email.

Attendance will be recorded daily and counts toward your final grade.

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.

Important dates:

First day of Class is Tuesday, May 29th.

Add/drop ends on Friday, June 1st.

Last day to withdraw from this course is Friday, June 15th.

Last day of Class is Friday, June 29th.

Final Exam is on Friday, June 29th from 2 pm - 5 pm.

Schedule: You will find a tentative schedule below. **This schedule is subject to change!**
 The covered chapters indicated in the schedule should be read by students prior to lectures.

Date	Lecture number/ subject	Chapter	Quizzes/problem-sets
WEEK 1			
T 5/29	1 - Intro and Alcohols (nomenclature, properties),	10	-
W 5/30	2 - Extra-credit review quiz , Alcohols (reactions)	10	HW1 due
R 5/31	3 - Alcohols (reactions)	10	-
F 6/1	4 - Ethers (intro, reactions)	11	-
WEEK 2			
M 6/4	5 - Ethers and Epoxides (reactions)	11	HW2 due
T 6/5	6 - Organometallic Chemistry, <i>select extra credit option in class</i>	15	HW3 due
W 6/6	7 - Aldehydes and Ketones	16	Quiz 1 - in class
R 6/7	8 - Aldehydes and Ketones	16	HW4 due
F 6/8	Exam 1	-	-
WEEK 3			
M 6/11	9 - Aldehydes and Ketones; Carboxylic Acids	16 / 17	HW4 due
T 6/12	10 - Carboxylic Acids	17	HW5 due
W 6/13	11 - Carboxylic Acids and Derivatives	17 / 18	Quiz 2 - in class
T 6/14	12 - Carboxylic Acid Derivatives	18	HW 6 due
F 6/15	Exam 2	-	-
WEEK 4			
M 6/18	13 - Carboxylic Acid Derivatives; Enols and Enolates	18 / 19	HW7 due
T 6/19	14 - Rxns of Enols & Enolates/Carbonyl Chemistry	19	<i>watch video b4 class</i>
W 6/20	15 - Rxns of Enols & Enolates/Carbonyl Chemistry	19	Quiz 3 - in class
R 6/21	16 - Rxns of Enols & Enolates/Carbonyl Chemistry	19	HW8 due
F 6/22	Exam 3	-	-
WEEK 5			
M 6/25	17 - Dienes, Conjugates Systems & MOs, Diels-Alder Rxn	20	HW9 due
T 6/26	18 - Diels-Alder Rxn and [2+2]-cycloaddition; Benzene	20 / 21	HW10 due
W 6/27	19 - Benzene and Aromaticity	21 / 22	Quiz 4 - in class, HW 11 due
R 6/28	20 - Benzene Reactions, Total Syntheses of select Drugs	22	HW 12 due
F 6/29	Final Exam 2 pm - 5 pm	cumulative	<i>ALL covered chapters</i>

Instructions for SAPLING enrollment:

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: [The College of William & Mary - CHEM 207 - Summer18 - LASHLEY](#)
4. If you are new to Sapling Learning familiarize yourself with the training materials and tutorials.

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 POLL EVERYWHERE enrollment:

1. Go to <https://www.polleverywhere.com/login>
2. Use your WM credentials to generate an account

This tool is FREE for WM students. Do not pay anything !

For further guidance and resources click here: <https://www.polleverywhere.com/guides/student>

Please have both SAPLING and POLL EVERYWHERE ready by the 1st day of class !