Chemistry 206L Organic Chemistry I Lab Spring 2022

Course Instructor: **Cemile Kumas** (ISC 1285, <u>ckumas@wm.edu</u>)

Senior Lab Specialist: Janet Hopkins (ISC 1037, <u>jlhopkins@wm.edu</u>, text: 434-962-0697) Laboratory Assistant: Kellyn McKee (ISC 1059, <u>kemckee@wm.edu</u>)

| Day | Time | Section Instructor | Instructor Email |
|-----------|-----------------|--------------------|-----------------------|
| Wednesday | 1:00 – 4:50 PM | Jonathan Scheerer | jrscheerer@wm.edu |
| Thursday | 8:00 – 11:50 AM | Elizabeth Harbron | <u>ejharb@wm.edu</u> |
| Thursday | 1:00 – 4:50 PM | Cemile Kumas | <u>ckumas@wm.edu</u> |
| Thursday | 6:00 – 9:50 PM | Douglas Young | dyoung01@wm.edu |
| Friday | 12:00 - 3:50 PM | Emily Hardy | <u>eehardy@wm.edu</u> |

Lab Times & Professors:

Laboratories: ISC I, Rooms 1028, 1036, 1040 and 1064

Office hours: Tuesday 11-12, Thursday 10-11

<u>Safety</u>

The Standard Operating Procedures for Laboratory Safety at William and Mary is a document that can be found on Blackboard. It presents the safety policies for everyone in the teaching labs. Before you will be allowed to work in the chemistry lab, you will receive instruction on laboratory safety and then you will be required to sign this document agreeing to abide by these standards. A copy of the agreement will be provided the first day of lab.

Chemical Splash Goggles:

No goggles – no lab! No exceptions! Failure to bring goggles will result in exclusion from that week's lab and will count as one absence.

Appropriate Shoes and Clothing:

- **Shoes** must cover the entire foot, including the top.
- **Upper body clothing** must cover the torso and the upper arm area. This includes the area below the neck, the midriff and shoulders. T-shirts are usually a good choice.
- **Lower body clothing** must cover the entire leg. Jeans with no holes are a good choice and full-length skirts are allowed.
- Some students make it a habit to keep a pair of sweatpants and an appropriate top in their backpacks to pull on when they come to lab. Remember, clothes can be damaged/stained in lab. Failure to comply with the lab shoe and clothing policy will result in exclusion from that week's lab and will count as one absence.

| Laboratory Schedule | | | | | |
|-------------------------|---------|---|---|--|--|
| Dates | Exp # | Experiment | Assessment | | |
| Feb 2 – 4 | 1 | Recrystallization and Melting Points | Pre-lab Quiz 1 due on Feb 2 at noon | | |
| Feb 9 – 11 | 2 | Extraction | Pre-lab Quiz 2 due on Feb 9 at noon | | |
| Feb 16 – 18 | 3 4 | Identification of Unknown Carboxylic Acid Gas Chromatography | BOTH Pre-lab Quiz 3 and 4 due on Feb 16 at noon | | |
| Feb 23 – 25 | 3 4 | Identification of Unknown Carboxylic Acid Gas Chromatography | - | | |
| Mar 2 – 4 | 5 | Molecular Modeling I | Pre-lab Quiz 5 due on Mar 2 at noon | | |
| Mar 9 – 11 | 6 | Distillation | Pre-lab Quiz 6 due on Mar 9 at noon | | |
| Mar 14 – 18 | | Spring Break | | | |
| Mar 23 – 25 | 7 8A | Midterm Thin Layer Chromatography Resolution and Polarimetry, Part A | Pre-lab Quiz 7 due on Mar 23 at noon | | |
| Mar 30 – 31, April 1 | 8B | Resolution and Polarimetry, Part B | Pre-lab Quiz 8 due on Mar 30 at noon | | |
| April 6 – 8 | 9 | Unknown Carbonyl Compound | Pre-lab Quiz 9 due on April 6 at noon | | |
| April 13 – 15 | 10A | Spectroscopy, Part 1 | No prelab | | |
| April 20 – 22 | 10B | Spectroscopy, Part 2 | No prelab | | |
| April 27 – 29 | 11 | SN1/SN2 Competition | Pre-lab Quiz 11 due on April 27 at noon | | |
| May 4 – 6 | | Final Exam | | | |

Enrollment Deadlines

Add/Drop Deadline: Friday, February 4, 2022, 11:59 p.m. Withdraw Deadline: Monday, March 28, 2022, 11:59 p.m.

Weekly Schedule

Previous Friday: The following week's experiment will be available on Blackboard no later than the Friday before it is due. In weeks when two labs are performed, both will be available two Fridays before they are due.

Wednesday, 12 Noon: Watch the pre-lab discussion, read the material and complete the prelab quiz on Blackboard by this time each week as indicated in the lab schedule above. The Wednesday noon deadline applies regardless of the day your lab is scheduled.

• You must successfully pass the quiz (20 pts.) by noon on Wednesday to be permitted into the lab. You have unlimited attempts, but you will lose 5 points for each additional attempt.

- If you pass the quiz past the due date but before the start time of your lab, you will be allowed in the lab, but you will have a 20% deduction in grade.
- Failure to successfully pass the pre-lab quiz by the start time of your lab section will result in exclusion from that week's lab and will count as one absence.
- If you have an **excusable absence**, the instructor may allow you to make up the prelab quiz, but you must contact Professor Kumas **within one week** of the absence to make these arrangements which are at the discretion of the professor.

Day of Your Lab: Make sure you are on time to lab! Be sure to bring:

- Printed lab instructions from Blackboard these can be two-sided copies
- Printed lab report sheets from Blackboard these must be single-sided.
- Chemical splash safety googles
- Appropriate shoes and clothing

Lab Reports

- Lab reports are due at the end of the lab period and are turned in by placing them in the grey file box at the back of the lab.
- Grading will be done using Gradescope, and in order to comply with FERPA regulations, you should not write your name anywhere on the front of the papers that you turn in. Instead, a space will be provided for you to write your student ID number on the top, right corner of each page.
- On the back of the first report page, please write your name in the upper, right corner along with the name of your partner. Since the report sheets are one-sided, the back will not be scanned and will not show up during the grading process. Writing your name on the back will allow instructors to locate your paper easier, without compromising anonymity during grading.
- Your lab reports will not be returned to you, but you will be able to see them in Blackboard after they have been graded.

Grading

There will be eleven labs this semester. For ten of the labs, you will take a pre-lab quiz (20 pts) on Blackboard prior to the lab and turn in report sheets (80 pts) when you leave lab on the day of the experiment, so that each lab is worth 100 pts total. For Spectroscopy, a two week experiment, there will be no pre-lab quiz but the lab report for each week will be worth 50 points.

900 Pts – Lab Report Sheets (10 labs @ 80 pts each; 1 lab @100 pts)

200 Pts – Pre-Lab Discussion Quizzes (10 quizzes @ 20 pts each)

200 Pts – Midterm (covering labs 1-6)

400 Pts – Final Exam (covering labs 1-11)

1,700 Points Total

The traditional 90%/80%/70%/60% grade cutoffs will be followed in the course.

Policy on absences and attendance

You are expected to have completed the required prelab material and to arrive on time for your lab each week. If you are not present when the roll is called, you will be considered tardy and receive a 10 point penalty. Anyone more than 10 minutes late to lab will not be permitted to conduct the experiment and will be marked absent.

In general, **you must attend the laboratory section for which you are registered.** In some cases, legitimate medical or personal reasons may prevent you from attending the assigned lab time. In this case, contact Professor Kumas, preferably in advance of the absence. If you can attend a different lab section and space is available, Professor Kumas or Mrs. Hopkins can make arrangements.

If circumstances prevent you from notifying Professor Kumas prior to the absence or you will not be able to come to lab at all that week, please **notify Professor Kumas within one week of the missed lab** and provide a reason for the absence. Understanding your situation may help us provide the support you need to successfully complete this course. If you do not contact Professor Kumas within a week of the missed lab, you will receive a grade of 0% on the relevant experiment.

Please note that you still will be responsible for understanding the material covered in any missed labs and will be tested on them. Because of the practical, hands-on nature of a laboratory course, no student can acceptably complete CHEM 206L after having missed more than three labs. If you must be absent more than three times, the options of a medical withdrawal or an incomplete may be possible and will be discussed with you.

Honor Code

Honor and integrity are mandatory. Engaging in any of the following activities is an honor code violation: (1) submitting written work that is not your own, even when data collection is shared! (2) sharing of any type of documents (ChemDraw, Excel, Word Docs etc.) that other students have prepared, either for this class or for prior semesters of organic lab. For more information, please see:

https://www.wm.edu/offices/deanofstudents/services/communityvalues/honorcodeandcouncils/ honorcode/index.php