
Chemistry 300 Laboratory Fall 2015

Lab Room: Cowley 460

Professor: Nicholas McGrath, Ph. D.

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Office: 4009 Cowley Hall

Time: T/Th 2:15-4:15 PM

Phone: 608-785-8287

Office Hours: Mon. 9:00-10:30

Tue. 11:30-1:00

Lab Materials

- ⬢ Lab Goggles: Available in the University Bookstore for ~\$7
- ⬢ Text: Pavia, Lampman, Kriz, and Engel, Microscale Approach to Organic Laboratory Techniques, Fifth Edition, 2013.
- ⬢ Carbon Copy Lab Notebook: Keeping a quality notebook is essential for success in this course. You will also be able to use your notebook on the exams, which should add motivation to keep a thorough notebook.
- ⬢ Lab Packet: A packet of experimental procedures will be given out that details what is expected during each lab period. Most of the experiments have associated reading in the lab text (Both background reading and New Techniques). This additional reading will be listed in the lab packet and should be completed prior to each experiment. You will be responsible for all pre-lab reading at the start of each lab period.

Graded Work:

⬢ Notebook Pages (60 Points)

You will turn in the carbon-copy notebook pages for each experiment that you perform in lab. Each experiment will be worth **5 points** and the score will be determined by various criteria including but not limited to: content (including each section outlined in the notebook handout), organization, and neatness.

⬢ Post-Lab Homework (120 Points)

Each experiment will have associated post-lab questions that will be used to emphasize the main take home points from each experiment and will be worth **10 points** each. **These post lab questions should be attached to the notebook pages that you turn in each week and will be due at the start of the first lab period after completion of the lab.**

⬢ NMR Problem Set (15 Points)

At various points during the semester you will be given a pre-lab quiz at the start of lab to ensure that you are keeping up with pre-lab reading and are prepared for lab prior to each experiment. Each quiz will be worth **15 points**.

⬢ Exams (120 Points)

There will be a midterm (**60 points**) and final exam (**60 points**) covering the experiments you conduct throughout the semester. The midterm will cover the first 5 experiments and the final exam will cover the final 6 experiments.

⬢ General Lab Practices (0-10 Bonus Points)

Throughout the semester, your general lab technique will be evaluated. This will include wearing goggles at all times during lab, properly locking your drawers after lab, demonstrating the ability to properly set-up a reaction apparatus as detailed in the lab handout, and following all the lab safety practices as outlined in the lab safety handout.

Total Course Points: 315 Points

*Adjustments to point totals may be made by the instructor throughout the course as necessary.

Lab Grades Breakdown:

Absences

Attendance to every scheduled lab period is mandatory. If you are unable to attend lab due to illness or an emergency, you must contact me before the start of the lab period. In emergencies when this is not possible, you need to contact me within 24 hours of the start of your scheduled lab time. Any missed work for unexcused absences will not be accepted for credit. Missed work for excused absences will need to be made up by the student in a timely fashion.

Students with Disabilities

Any student with a documented disability (e.g. ADHD, Autism Spectrum Disorder, Acquired Brain Injury, PTSD, Physical, Sensory, Psychological, or Learning Disability) who needs to arrange academic accommodations must contact The ACCESS Center (165 Murphy Library, 608-785-6900, ACCESSCenter@uwlax.edu) and meet with an advisor to register and develop an accommodation plan. In addition to registering with The ACCESS Center, it is the student's responsibility to discuss their academic needs with their instructors. You can find out more about services available to students with disabilities at [The ACCESS Center website](#).

Academic Misconduct

Academic misconduct is a violation of the the [UW-L Student Honor Code](#) and is unacceptable. All work handed in for this class must be the students' own individual work. Plagiarism or cheating in any form may result in failure of the assignment or exam, failure of the course, and may include harsher sanctions. Refer to the UW-La Crosse [Student Handbook](#) for a detailed definition of academic misconduct. For helpful information on how to avoid plagiarism, go to <http://libguides.uwlax.edu/content.php?pid=363671>. You may also visit the Student Life Office if you have questions about plagiarism or cheating incidents. I encourage you to discuss any concerns about plagiarism or cheating with me directly and well before any assignments are handed in. Failure to understand what constitutes plagiarism or cheating is not a valid excuse for engaging in academic misconduct.

Veterans and Active Military Personnel

Veterans and active military personnel with special circumstances (e.g., upcoming deployments, drill requirements, disabilities) are welcome and encouraged to communicate these, in advance if possible, to me. For additional information and assistance, contact the [Veterans Services Office](#). Students who need to withdraw from class or from the university due to military orders should be aware of the [military duty withdrawal policy](#).

I Am a Mandated Reporter

As a faculty member of the University of Wisconsin-La Crosse, I am a mandated reporter of sexual harassment (including sexual violence). This means that I am obligated to disclose any detailed or specific information I receive about such incidents involving a member of this campus while that person is a member of this campus, regardless of whether the incident takes place on campus or off. I care about your well-being, and our course assignments sometimes lend themselves to disclosure, but you should not share any details of an incident with me **until you have discussed your options** under the new Title IX guidelines. There are confidential reporters available to students at UW-L where you can have this discussion. The contact in Student Life is Ingrid Peterson, Violence Prevention Specialist, at (608) 785-8062 or ipeterson@uwlax.edu. I am also happy to help direct you to counseling and support services. Simply ask me to assist you in locating a confidential reporter and I will help you to do so.

Communication about Class Interruptions

In the event of a campus incident that impacts the availability of teaching spaces, any changes or cancellations will be communicated to you via your university email account. Depending on the incident, some or all of the information might be posted on the UW-L home page.

Schedule of Experiments

Date	Experiment
09/08	Introduction, safety, notebooks, glassware, check-in
09/10, 09/15	Separation by Solubility Class
09/17	TLC Analysis of Analgesics
09/22, 09/24	Distillation of Methanol and 1-Propanol
09/29, 10/01	Chlorophyll and Carotenoid Pigments from Spinach
10/06, 10/08	Molecular Models
10/13, 10/15	Isolation of Caffeine from Tea
10/20, 10/22	(+)-Limonene Isolation
10/27	Midterm Lab Exam
10/29, 11/03	Nitration of Methyl Benzoate
11/05, 11/10, 11/12	Grignard Reaction
11/17, 11/19	Synthesis of Hydrobenzoin with Sodium Borohydride
11/24, 12/01	Synthesis and Identification of Unknown Esters
12/03	NMR Spectroscopy
12/8, 12/10	Aspirin Synthesis & Check-Out
12/15	Final Lab Exam