

PREREQUISITE: CHM102REQUIRED TEXTS:

- ♥ Organic Chemistry: Chemistry 211-212 Laboratory Manual (2<sup>nd</sup> Edition—**RED** cover)
- ♥ Carbonless Laboratory Notebook

Lab Instructor: _____
Office #: _____
Office Hours: _____
Email: _____

**\*\*\*TENTATIVE SCHEDULE\*\*\***

Date	Exp. #	Experiment Title
1/23	***	Intro to Lab Safety and Laboratory Notebook Maintenance
1/30	1	Structure, Intermolecular Forces, and Solubility
2/6	4	TLC and HPLC of Nitroanilines
2/13	6	Extraction of Analgesics
2/20	7	Recrystallization, Melting Point, and HPLC Analysis of Analgesics
2/27	3	Stereochemistry and Molecular Modeling <b>Quiz 1 (Exp. 1, 4, 6, 7)</b>
3/5	2	Distillation and Gas Chromatography of Alkanes
3/12	***	<b>NO LAB</b> —Spring Break
3/19	9	Stereochemistry: Enantiomers and Diastereomers
3/26	10	Acid-Catalyzed Dehydration of an Alcohol with Rearrangement
4/2	11	Conversion of an Alcohol to an Alkyl Bromide with Rearrangement <b>Quiz 2 (Exp. 2, 3, 9)</b>
4/9	12	Base Promoted Elimination of HBr from an Alkyl Halide
4/16	8	Bromination of Stilbene: A Green Chemistry Synthesis
4/23	***	Lab Checkout <b>Quiz 3 (Exp. 8, 10, 11, 12)</b>

Learning Outcomes

- A student taking this course in the Department of Chemistry and Biochemistry at UNCW will be introduced to basic laboratory techniques such as distillation, liquid extraction, recrystallization, liquid and gas chromatography, and computational chemistry. Once introduced, the student will demonstrate the ability to perform laboratory-based experiments, utilizing appropriate equipment, while applying proper procedures and adhering to safety guidelines.

Academic Integrity

- All members of UNCW's community are expected to follow the academic Honor Code. (<http://uncw.edu/stuaff/odos/honorcode/index.html>)
- Please be especially familiar with UNCW's position on plagiarism as outlined in the UNCW Student Handbook. Plagiarism is a form of academic dishonesty in which you take someone else's ideas and represent them as your own.

Attendance

- Attendance at all labs is mandatory. You must attend **your scheduled lab**. There are **no make-up labs for any reason**. If you miss a lab, you will receive a score of 0 for that day.
- Athletic events are **not** excused absences. Student athletes should schedule classes in such a way that they will not miss a class with an attendance policy. Discuss scheduling concerns with your coach or athletic director.
- **If you miss three or more labs (including those for which you were more than 10 minutes late) you will receive a grade of "F" for the entire course.**

Lab Safety

- Any student who has not taken CHM102, or has taken but not received a "C" or better, will be administratively withdrawn from the course.
- **For safety reasons, you will not be admitted to lab after the first 10 minutes, without closed toe shoes, without a completed pre-lab assignment, or without safety glasses.**

### Course Grading:

A = 90-100, B = 80-89, C = 70-79, D = 60-69, F = 59 and below. Plus (+) or minus (-) grades may be awarded at the discretion of the instructor.

### Lab Quizzes (45%):

- 3 lab quizzes will be given, testing on 3-4 experiments each.
- Study guides will be provided on the course website.
- There will be a full lab experiment performed on each lab quiz day. Plan to attend the entire lab period.
- **Make up quizzes will only be allowed for excused absences.** A make up quiz may be allowed under extreme circumstances, such as a death in the family or jury duty. You must contact your lab instructor *prior* to the absence for consideration.

### Laboratory Notebook Maintenance (~10%)

- Your notebook will consist of pre-lab and in-lab entries as described in class, in Appendix C in the lab manual, and on the course website.
- *Pre-lab* entries are due at the beginning of each lab period. Lab instructors will check to make sure the pre-lab assignment is complete before the lab begins. A student without a complete pre-lab assignment will be excused from the class, and receive a **zero** on the experiment.
- *In-lab* notebook entries will be maintained by each student during the lab period. Each student will submit individual copies of the yellow carbon pages containing in-lab entries attached to the final lab report when submitted for grading.

### Laboratory Reports (~35%)

- Due dates will be announced by lab instructor.
- Late lab reports will receive a penalty of 5% of total grade per day. Unless previously arranged with instructor, once graded lab reports are returned to students, **no more lab reports will be accepted.**

### Lab Technique (~10%)

- Up to 10% of the final grade for each experiment will be based on technique. Penalties can be given without warning by the lab instructor for bad lab technique and etiquette. In order to receive the maximum score on the technique portion of your grade you should:
  - Keep work area and lab equipment clean and returned to proper location.
  - Come prepared to work, submit samples for analysis when required, and plan to stay the entire lab period.
  - Adhere to safety policies and procedures stated on the safety contract.

\*\*\* At the end of the semester, each student will be responsible for the contents and cleanliness of their lab drawers. Any student leaving their assigned lab drawer missing glassware, or with dirty glassware, will be penalized on their technique grade, resulting in a lower final average for the semester. \*\*\*

### Use of Personal Electronics

- **Cell phone use will not be tolerated in this class.** Silence your cell phones and put them away prior to class. If your cell phone rings, or you are caught using your cell phone for any reason, you will be asked to leave the class and receive a zero for the experiment.
- Laptops and desktop computer use is allowed for lab related materials **ONLY**. Any student seen engaging in non-laboratory related activity will be asked to leave the class, and will receive a **zero** for the lab.

### Students with Disabilities

- Students with diagnosed disabilities should contact the Office of Disability Services (<http://uncw.edu/stuaff/disability>).
- Please submit a copy of the letter you receive from Office of Disability Services detailing class accommodations you may need. If you require accommodation for test-taking, please be sure to have referral letter submitted **no less than 3 days** before the test.

### Violence and Harassment

- UNCW practices a zero tolerance policy for any kind of violent or harassing behavior. If you are experiencing an emergency of this type contact the police at 911 or UNCW CARE at 962-2273. Resources for individuals concerned with a violent or harassing situation can be located at <http://www.uncw.edu/wsrc/crisis.html>.