

Chemistry 3602
Organic Chemistry Laboratory: Fall 2017

Dr. Michael G. Richmond
Room 366 or 101e, Chemistry Building
email: Cobalt@unt.edu
Office hours: Tuesdays, 1:00-2:00 pm, and by appointment

Textbook: "Macroscale and Microscale Organic Experiments," Seventh Edition, Williamson and Masters

SAFETY: Texas State Law and common sense require eye protection in the form of glasses or goggles for all persons in academic chemical laboratories. This policy will be strictly enforced. **PERSISTENT OFFENDERS WILL BE DROPPED WITH "WF"**.

The wearing of contact lens is not encouraged during laboratory class because eye contact with corrosive chemicals can cause damage before the lens can be removed. In addition, open-toe shoes and bare feet are not permitted.

Good clothing which might be damaged should not be worn. Report all accidents to your TA at once. Read the safety rules inside the cover and in chapter 2.

All students are responsible for their actions in the laboratory and the results of those actions. All students must pass a Quiz on laboratory safety during the first week of class. Students who do not, may not work in the lab.

The Chemistry Department believes in reasonably accommodating individuals with disabilities. If you have a disability for which you will require accommodation under the terms of the Americans with Disabilities Act (1990) or Section 504 of the Rehabilitation Act of 1973, you should discuss your needs with me as soon as possible. You are also encouraged to register with the Office of Disability Accommodation (Room 318A in the Union, ext. 4323).

QUIZZES: There will be three quizzes. The first quiz is a safety quiz that deals with aspects of general lab safety and the location of various safety items in the organic laboratory. Quizzes 2 and 3 will be take-home quizzes that must be turned in by the date announced during the lab lecture class. Quizzes turned in late will not be graded.

ATTENDANCE: You are required to attend all scheduled laboratory classes. Be prompt. If you cannot attend, contact me as soon as possible before the lab is due to start. Reagents will only be available for the week indicated. Make-up labs are not possible and unexcused absences will result in a lab grade of zero. Reports for missed labs will not be accepted.

GRADING:	9 experiments @ 20 points	180
	3 quizzes @ 20 points	60
	Total possible points	240

The grade distribution for each experiment (some TA instructors may use a different distribution):

Pre-lab write up	5 points
Results	5 points
Observations and conclusions	4 points
Laboratory tidiness and behavior	2 points
Post lab questions	4 points
TOTAL	20

Lab reports from the previous week are due at the next scheduled lab class. This will allow you to complete your reports over the weekend. However, your last lab is due by December, 3. Late labs will be penalized appropriately. Graded reports will be returned after being turned into the TA. Lab reports must be legible. The TAs do not have to grade anything that they cannot read. You are encouraged to use word processors.

The format of the lab report is:

1. **Heading:** This includes the title of the experiment, your name, lab section, date and collaborators (if any),
2. **Summary of the experiment:** Give the purpose and important reactions. One or two lines or a chemical equation should be sufficient.
3. **Experimental Procedure:** This is very important. It must be sufficiently detailed so that any knowledgeable person (including yourself) can carry out the experiment. You may use **flow charts**. These are very helpful in saving space and giving a clear plan of action. **DO NOT JUST COPY THE TEXT BOOK!**

During the course, there will be some changes to the procedures in the text. You will be told about these in the lecture and in writing in good time. Make sure that you incorporate these changes in your procedure.

Keep your write-up concise so that you do not spend too much time writing and so that you can find the information that you need quickly.

Your pre-lab preparation is the major factor in determining the success of your experiments. It is also a major factor in having a SAFE LAB.

THE ABOVE ITEMS MUST BE SEEN BY YOUR INSTRUCTOR BEFORE YOU WILL BE PERMITTED TO BEGIN YOUR EXPERIMENTAL WORK.

4. **Observations and results:** This is the information obtained during the lab while you are carrying out the experiment. Record your observations during the experiment, i.e., what you see during the reaction, even if it goes according to the procedure. Also record data such as melting points, boiling points, the mass of product, and deviations from the original procedure.
5. **Conclusions:** This is the last section and is done after the lab. It includes a brief summary of your conclusions and calculation of % yields. Show all work.
6. **Post-Lab Questions (same as homework questions):** Will be assigned at the time of the lab lecture. These will usually be from the lab book.

Your laboratory instructor may have his/her particular requirements concerning additional details about how lab reports will be written. If you have any questions, just ask.