CHEM-269, Organic Chemistry Lab – Day One

## Preparation for Check-In

1. We will supply you with safety glasses. We will have two types available. One that fits over prescription eyeglasses and one for those who do not wear glasses.

2. Complete the OWLs on lab safety and Course Policies. You must complete at least these OWLs before the start of your lab. This is a legal issue and cannot be waived.

## General lab rules:

- Never pour anything except water into the sinks – all other liquids and solids are considered hazardous waste.

## Waste disposal:

- Dispose of all waste in the proper containers. Your TA will point out the proper waste containers. Regular trash: no glass or chemicals – ever.

- Glass waste box: broken glass only! No chemical waste or regular trash. Waste hood: liquid waste bottle, solid waste jar

- Used gloves go in the regular trash unless otherwise directed by your TA.

## Safety equipment:

- Eyewash station: if a chemical gets into your eyes, immediately alert your TA in a loud voice – do not be shy! Have nearby students help if necessary.
    - In the event it is needed, your TA will lead you to the eyewash station, turn on the water, and help you hold your eyes in the fountain for 15 minutes. You will then go to the health center. Always rinse your eyes if you get chemicals in them – the damage could be permanent.

- Safety shower: the safety shower is used only in extreme emergencies when you have spilled large amounts of chemicals onto your body.

    - Again, alert your TA, who will decide whether you need the safety shower or can safely rinse at the sink. You will need to remove contaminated clothing. Do not be shy – your health and safety is more important than temporary embarrassment. All students should be supportive and respectful of anyone in an emergency situation.

    - Never use the safety shower unless it is absolutely required. It will flood the floor with 55 gallons of water per minute

**Experiment Cleanup**:

- Before leaving the lab each day you must put away all your equipment and fully clean your hood and bench area. The TA will check that you have done so. Failure to clean your area will result in loss of lab technique points on your lab report grade.

*Make sure your TA checks your area and signs their "student ok to leave" sheet before leaving the lab.*

**Check in**:

- Listen to your TA's talk about check-in and the melting point experiment.
- Check-in your drawer contents by comparing the equipment in your drawer with the apparatus list provided to you. Pictures of the equipment will be on the center bench and are posted on the web. The microscale equipment pictures are labeled with letters matching those on the list.
- Place any extra items into the plastic bin on the supply bench.
- Replace any items that are missing. Your TA will point out the specific locations of replacement equipment you might need.

**Preparation for the First Experiment – Melting Point**

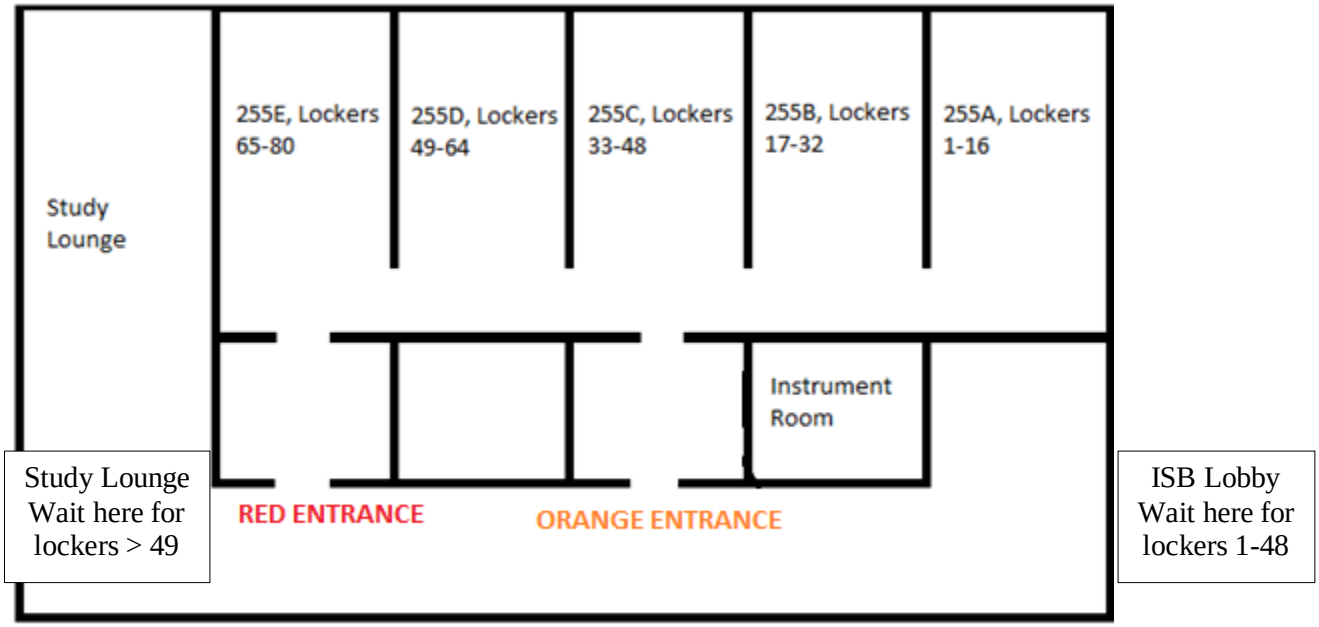
1. Print out the melting point handout from schedule of experiments.
2. Complete the Melting Point OWL pre-lab assignment.
3. Write a good prelab outline (read the technique-experiment-prelab-example on the "general handouts" page) before coming to lab.
    - Test of a good outline? Could you do the experiment using *only* your outline?
4. Purchase your lab coat from the Campus Center store, and wear proper lab attire (see the safety dress code handout on the course webpage). You will not be allowed to work in the lab if you are not properly dressed.

If you have not done the pre-lab write up, you will not be allowed to work in the lab.

**Where do I go in the ISB?**

1. Go to the 2nd floor of ISB and find the entrance to 255. Just outside the double doors to the right of the staircase next to the main ISB entrance (Pleasant St). Find your name on the list and note room (255A, 255B or 255C) and locker number. **If your name does not appear on the list, go to step 3**. See map below.
2. Wait in lobby until you are asked to enter the lab. Go about halfway down the lab corridor and enter via the orange entrance on the right. See map below. Go to step 4.
3. You are reading this step because your name is not on the list outside double doors. Enter double doors, go all the way down the hall to the red entrance (right side) and find your name on that list and note room (255D or 255E) and locker number. Wait in the study lounge until you are asked to enter the lab. Go to step 4. See map below

4. When asked to enter lab, find your room and locker and immediately put on safety glasses/goggles.




**On Day One - Check-In and the Melting Point Experiment**

- The TA will give an introduction to the lab and a melting point pre-lab talk. Afterwards, you can then check-in your equipment referencing photos, checklists. Sign the equipment document and Safety Dress Code and Consequences forms.
- Afterwards, your TA will make sure your melting point pre-lab outline is adequate.
- Once your TA has signed off on your pre-lab outline, begin with the melting point experiment.
- Keep good notes as you work - see the handout on course website for sample notebook entries and a report.
- When finished, cleanup work areas (both inside fume hood and lab bench), turn off all electrical devices, water supply valve and vacuum, and make sure your TA signs their "student ok to leave" sheet.

When you are finished reading this document, go back to the course website. Read all documents that are left in the general handouts page and the check-in and melting point page.

**Future Labs and Postlab Work:**

Do melting point experiment postlab OWL assignment. Complete the post-lab report in your ELN for melting point; prepare for Thin-Layer Chromatography experiment as you did for melting point. Repeat for remainder of semester.