

SYLLABUS
Chem 2543: Organic Chemistry I Lab
Spring Semester 2012

INSTRUCTOR: Dr. Viktor V. Zhdankin
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Office Hours: M, W, F 8:00 to 9:00 am or by appointment

LABORATORY TIME: *Section 1:* 3:00 - 4:50 pm, Monday, SSB 226
Section 2: 9:00 - 10:50 am, Tuesday, SSB 226
Section 3: 3:00 - 4:50 pm, Wednesday, SSB 226
Section 4: 12:00 - 1:50 pm, Thursday, SSB 226

Please note: Section 1 will have safety training, check-in and the first experiment in the first laboratory period.

All other sections will ONLY have safety training and check-in in the first laboratory period.

LABORATORY MATERIALS:

1. "Macroscale and Microscale Organic Experiments" by Williamson/ Minard/ Masters, 5th Edition.
2. Laboratory Breakage Card
3. Safety Goggles
4. Bound Laboratory Notebook (Composition type)

| TEACHING ASSISTANTS: | <u>Name</u> | <u>E-mail</u> | <u>Office Hours</u> |
|-----------------------------|---------------------|--|---------------------|
| | Margarita Geraskina | gera0141@d.umn.edu | TBA |
| | Kyle Middleton | middl051@d.umn.edu | TBA |

Grading:

This organic chemistry lab is worth **150** points.

- **12 Experiments:** 10 points for each lab (10 x 10 = 100 points)
- **10 five-minutes Quizzes:** 3 points for each quiz (3 x 10 = 30 points)

Each experiment includes two post-lab questions and each question is worth 1 point. The rest 8 points are distributed in particular lab. The grade for each experiment is primarily based on your lab notebook and general performance. Your laboratory notebooks will be collected on 2-3 occasions (times to be announced). If you hand in your lab notebook late, points will be deducted.

At the beginning of most laboratory periods there will be a short five-minute quiz about your understanding of the experiment.

General Laboratory Rules and Requirements:

You **MUST** have a bound laboratory notebook - Composition style.

You **MUST** have and wear fully enclosing goggles (glasses don't count). If you do not own a pair you can buy them from the stockroom. If you forget your goggles you can rent them from the stockroom. The first time is free and it is \$.50 after that.

It is recommended you DO NOT wear shorts, sandals, or nylon type running pants. These offer little protection from chemicals in the event of an accident.

DO NOT sit on the lab benches.

DO NOT touch door handles with gloves.

DO NOT eat or drink in the lab.

Place your bags and coats on the shelves provided or specified area.

IMPORTANT: Leave your work-space clean and neat. Clean-up after yourself.

For your safety we suggest you wash your hands when leaving the lab.

Keep an informative and NEAT lab notebook. Make sure you:

1. Use a pen.
2. Draw a single line through a mistake. Do not scribble or use whiteout.
3. Keep notebook in column format.
4. Write on one side of the page.
5. Make sure your procedures are complete **before** you begin the lab.

Notebook.

- 1) *Title.*
- 2) *Reference.*
- 3) *Lab. Partner.*
- 4) *Reaction Schemes.*
 - 1) **If you have reactions** write down reaction scheme and reaction mechanism. 2) **If you don't have reactions** write molecular structures for all compounds that you use. 3) Molecular structures should be presented in each lab work whether you have reactions or not.
- 5) *Apparatus.* Draw apparatus that you use. It should be done for each lab work.
- 6) *Procedures.*
 - 1) All the procedures have to be written in accordance with handout. **No cut.** 2) If you asked to make any calculations in procedure section you have to do it.
- 7) *Observations.*
 - 1) Observations should be written in a full manner. 2) Each observation should correlate with procedure. 3) If you have to weight a compound/to take specific volume of liquid you should write these data in observation section. 4) If you get something after procedures (i.e. compound, weight it; liquid, measure a volume) these data also should be written in observation section and correlated to

procedure. 5) You should write down any data that you use or get (i.e. mass, g; temperature, range of °C; volume of liquid, ml) in observation section.

8) *Results.*

9) 1) If you have to calculate any values (i.e. recovery) you should do it in result section. **No exceptions to this rule.** 2) Write down formulas for calculations, calculations and the answer. 3) This should be done for each lab work containing any type of calculations to be done. 4) Here you should also write down any specific results that you get in a lab work.

10) *Discussion.* Here you should try to summarize the results of your work in a text form, give some conclusions, suggestions and explanation of how work is proceed.

11) *Pre-lab and post-lab tasks.*

1) Pre-lab tasks should be written in the notebook. Pre-lab will be checked and TA will sign your pre-lab every time before to start an experiment 2) Post-lab tasks should be written in the notebook. 3) These tasks should be referred to a corresponding lab work. **No exceptions to this rule.**

12) Home task should be written correctly to avoid its absence in the notebook.

13) Each task should be done in that manner as it was asked to be done.

14) If you are not sure that home task is written by you correctly, answers to problem are correct or you don't know how to do the task you should come to TA and ask/tell about it.

15) Everything in your notebook should be written in accurate manner.

The **Statement on Student Conduct Code** can be found at: <http://www.d.umn.edu/assl/conduct/code/>

The **Student Academic Integrity Policy** can be found at: www.d.umn.edu/assl/conduct/integrity

Access for Students with Disabilities: *Individuals who have any disability or physical condition (such as pregnancy, allergy, etc.), either permanent or temporary, which might affect their ability to perform in the lab, are encouraged to inform the instructor at the start of the semester. It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Adaptations of methods, materials or testing may be made as required to provide for equitable participation. This publication/material is available in alternative formats to individuals with disabilities upon request. Please contact Penny Cragun, Office of Disability Resources, 726-8727*