2124 Syllabus Fall 2016

UTEP Department of Chemistry CCSB Building, Rooms 1.0506 & 1.0508

Mon: CRN 13749, room 1.0506, 2:30 pm-5:20 pm

Wed: CRN 13750, room 1.0506 & CRN 13751, room 1.0508, 8:30 am-11:20 am Fri: CRN 15168, room 1.0506 & CRN 12359, room 1.0508, 11:30 am-2:20 pm

Instructor: Dr. Saideh Mortazavi (ssmortazavi@utep.edu) **Office hours:** Before or after the lab or by Appointment

Mon TA in room 1.0506: Julio Padilla (jepadilla@miners.utep.edu)

Office: CCSB 2.0506 Office hours: Mon 1:00 pm-2:00 pm

Wed TA in room 1.0506: Julio Padilla (jepadilla@miners.utep.edu)

Office: CCSB 2.0506 Office hours: Wed 11:30 am-12:30 pm

Wed TA in room 1.0508: Yuejiao Xian (yxian@miners.utep.edu)

Office: CCSB G.0512 Office hours: Fri, 11:30 am-12:30 pm

Fri TA in room 1.0506: Alex Rodriguez (arodriguez109@miners.utep.edu)

Office: CCSB G.0510A Office hours: Fri, 2:30 pm-3:30 pm

Fri TA in room 1.0508: Yuejiao Xian (yxian@miners.utep.edu)

Office: CCSB G.0512 Office hours: Fri, 2:30 pm-3:30 pm

Textbook: Experimental Organic Chemistry, 2nd Ed. Charles F. Wilcox and Mary Wilcox

Course Objectives:

- Become familiar with basic organic chemistry methods and techniques
- Learn how to comply with laboratory safety polices
- Maintain a proper laboratory notebook
- Learn how to follow proper chemical waste disposal procedures

Your grade consists of:

- a) Adherence to laboratory safety, good laboratory technique, and laboratory hygiene (1/3)
- b) Pre-Lab Quizzes (1/3)
- c) Post-Lab Reports (1/3)

Grade Cutoff: A > 89.5 %, B > 79.5 %, C > 69.5 %, D > 59.5 %

Attendance:

No makeup Pre-Lab Quizzes and/or Post-Lab Reports for unexcused absences will be accepted unless proper medical documentation or university sanctioned event proof is provided. Students who miss a lab for an unexcused reason will lose 100% of the credit for that week. However, for an **excused absence**, your TA may offer the makeup lab at another time he or she runs a lab or offer the makeup lab in another section with another TA. Then, you **must arrange** for the grading to be transferred to your section.

Pre-Lab Quizzes and Post-Lab Reports:

All students are expected to have read the information about each lab in the Wilcox/Wilcox text book in advance, so you should be fully prepared for the weekly Pre-Lab Quizzes and Post-Lab Reports and for the laboratory activity of that day (please see the detailed schedule below). Therefore, students are expected to know about the day experiment and the structures of the chemicals they are working with. On the first day you will be given access to your 2124 course moodle through http://organic.utep.edu/moodle to do your Pre-Lab Quizzes and Post-Lab Reports throughout the semester. Use your email address (username@miners.utep.edu) and student ID to enter the first time; then you can change your password. Pre-Lab Quizzes will be available one day before your lab, and Post-Lab Report links will open the night of your lab and close the following week. For instance, the lab on Tuesday, September 13, will have access to their first pre-lab quiz on Monday, September 12 only.

Important safety rules:

- The basic safety rule in this course is that:
 - SAFETY GOGGLES and LAB COATS MUST BE WORN IN THE LAB AT ALL TIMES
- If you do not have Goggles, or refuse to wear them, then you will **NOT** be allowed to participate in the course activities, or remain in the lab. Wearing goggles is a State law, and you do not have the choice to not comply.
- Know where the eye wash, safety shower, and fire extinguisher are located
- Always know the danger of the chemicals you are working with, e.g. sulfuric acid. You should research the safety and chemical reactivity of all reagents before coming to class and ask your TA if you have any further questions.
- Wear closed shoes (no rubber sippers or open sandals)
- Long hair must be tied back
- Wear long pants (no skirts or shorts)
- No hats
- No food/drink items are allowed in a chemistry laboratory
- Keep your work space clean!
- If there is a chemical spill, inform the TA immediately.
- If you are injured (a cut, inhalation of toxic gases, acid burn on skin, etc.) inform your TA immediately. We are required to file reports of all injuries, no matter how minor, and also to offer you the option to seek medical aid.

Important waste information:

- None of the waste can go down the drain.
- Organic solvent waste, aqueous waste, solid waste, and glass waste is collected separately and placed into designated waste containers.
- You are not permitted to leave the lab without properly disposing of chemical waste.

Note that hoods and benches are labeled and your group which is made of two students will always work in the same hood/bench. All chemical activities are done in the hood. The bench is for maintaining your notebook and supplies for your activity. Please make sure that labeled equipment remains in the hood or on the bench that matches that labeling.

Week of	Lab Activity (Chapter)
9/6 – 9/12	Laboratory Safety & Introduction to IR
9/13 – 9/19	Melting Points (8.4A) & Introduction to NMR
9/20 – 9/26	Crystallization (8.4B or 8.4C, & 8.4D)
9/27 – 10/3	Simple and Fractional distillation (5.4A & 5.4B)
10/4 - 10/10	Extraction (9.7B) and Sublimation (8.3)
10/11 - 10/17	Chromatography (10.7A and/or 10.7B and/or 10.7C)
10/18 - 10/24	SN1 reaction (18.3C)
10/25 - 10/31	Chemical Kinetics (20.4)
11/1 – 11/7	Synthesis of Aspirin (49.2A)
11/8 – 11/14	E1 Reaction (21.5A)
11/15 – 11/22	Synthesis of Isopentyl Acetate (modified 30.2)