University of Texas at El Paso

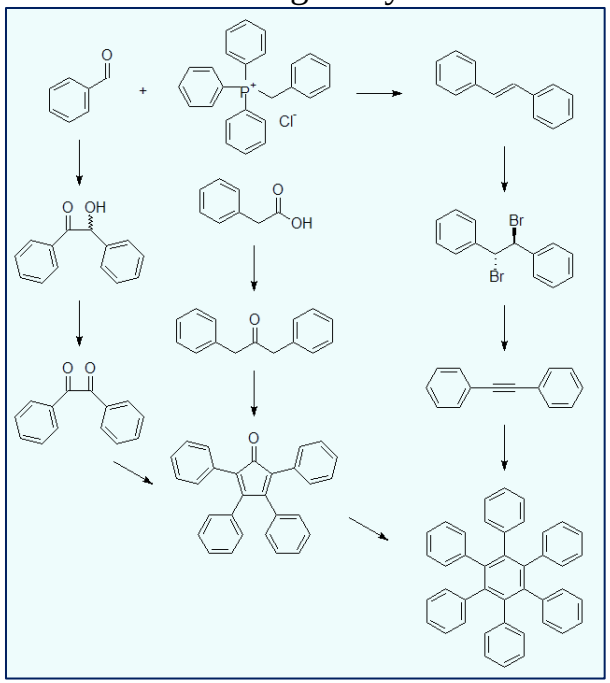
Department of Chemistry and Biochemistry

CHEM 2125 Syllabus for Spring 2022

CRNs	Instructor Name	Instructor Email	Zoom Link to Virtual Office by Appointment via Email
27962	Dr. Hemant Sharma	hsharma@utep.edu	https://utep-edu.zoom.us/j/87925099221?pwd=cktlb0NZUGw4OEZJc2phN3IvRWphUT09
21613	"	"	"
21614	"	"	"
22446	"	"	"
21644	"	"	"
21965	"	"	"
27818	Dr. Katja Michael	Kmichael@utep.edu	Per request, a private link will be sent.
25349	"	"	"
29605	Dr. Saideh Mortazavi	ssmortazavi@utep.edu	https://utep-edu.zoom.us/j/88443779477?pwd=NmM4RzZRU3JrMFducEpwWnRhUDN6UT09
22447	"	"	"
25350	"	"	"
24565	Dr. Yaoqiu Zhu	yzhu2@utep.edu	https://utep-edu.zoom.us/j/87995132440?pwd=eE80SWpXMHUvUTVoMWJudFhWUmVzUT09
29483	Dr. Nancy Rodriguez	nrodriguez14@utep.edu	"
29478	"	"	"

CRNs	TA Name	TA Email	Zoom Link to Virtual Office by Appointment via Email
27962	Navid Attarzadeh	nattarzadeh@utep.edu	https://utep-edu.zoom.us/j/87925099221?pwd=cktlb0NZUGw4OEZJc2phN3IvRWphUT09
21613	Navid Attarzadeh	"	"
21614	Javier Hernandez	jhernandez163@miners.utep.edu	"
22446	Javier Hernandez	"	"
21644	Zhaobo Li	zli4@miners.utep.edu	"
21965	Zhaobo Li	"	"
27818	Frank Macgregor	fmacgregor@miners.utep.edu	https://utep-edu.zoom.us/j/87995132440?pwd=eE80SWpXMHUvUTVoMWJudFhWUmVzUT09
25349	Frank Macgregor	"	"
29605	Jeffrey Richards	jsrichards@utep.edu	https://utep-edu.zoom.us/j/88443779477?pwd=NmM4RzZRU3JrMFducEpwWnRhUDN6UT09
22447	Jeffrey Richards	"	"
25350	Daniel Von Salzen	dhvonsalzen@miners.utep.edu	"
24565	Daniel Von Salzen	"	https://utep-edu.zoom.us/j/87995132440?pwd=eE80SWpXMHUvUTVoMWJudFhWUmVzUT09
29483	Jose Rosales	jarosales3@miners.utep.edu	"
29478	Jose Rosales	"	"

2125 Convergent Syntheses



Week	Date	2125 Course Curriculum
1	Jan 18 - 23	No Labs
2	24 - 30	Laboratory Safety (Ch 1) - Introducing 2125 Bb shell
3	31 - Feb 6	Benzaldehyde (Ch 6, procedure on page 75)
4	7 - 13	Stilbene (Ch 28, procedure on page 369) & IR Review (Ch 13)
5	14 - 20	Stilbene continued & IR
6	21 - 27	Stilbene Dibromide (Ch 28, procedure on page 370) & IR
7	28 - Mar 6	Diphenylacetylene (Ch 28, procedure on page 370) & NMR Review (Ch 15)
8	7 - 13	In-Person Midterm Exam in the Lab (Safety - Diphenylacetylene & IR)
9	14 - 20	Spring Break
10	21 - 27	Dibenzyl Ketone (Davis, R; Schultz, H.P.Journal Organic Chemistry1962, volume 27, page 854) *
11	28 - Apr 3	Benzoin (Ch 48, procedure on page 481)
12	4 - 10	Benzil (Ch 48, procedure on page 482) & NMR
13	11 - 17	Tetraphenylcyclopentadienone (Ch 34 procedure on page 400) & NMR
14	18 - 24	Hexaphenylbenzene (Ch 41 procedure on page 438) & IR-NMR
15	25 - May 1	In-Person Final Exam in the Lab (Dibenzyl Ketone - Hexaphenylbenzene & NMR)
16	2 - 8	No Labs! May 5: Last day of classes - Friday, May 6: Dead day.
17	9 -13	No Labs! Lecture Final Exams

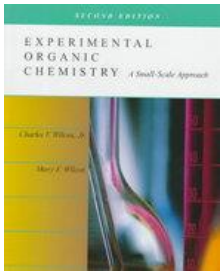
* Mar 25th, Holiday: Dibenzyl Ketone will be conducted online ONLY for Friday students.

Required Materials

1. Wilcox & Wilcox textbook or access to the on-line excerpts of this text.
2. Goggles (not safety glasses). A seal should form around your eyes.
3. Pants (not shorts). Your legs must be covered.
4. Shoes (not sandals). Your feet must be completely covered.
5. A lab coat.

You will be turned away and earn a zero in attendance for missing safety attire!

Textbook: Experimental Organic Chemistry, A Small-Scale Approach, 2nd Ed; Wilcox & Wilcox



Excerpts from the Wilcox & Wilcox textbook relevant to the Chem 2125 lab can be accessed on-line at the UTEP library course reserves. The instruction on how to find access is available on Blackboard under Syllabus/Course Info menu. The following URL is the link to the course reserves:
https://utep.primo.exlibrisgroup.com/discovery/search?query=any,contains,CHEM%202125&tab=CourseReserves&search_scope=CourseReserves&sortby=author&vid=01UTEP_INST:01UTEP&lang=en&offset=0

Attendance: Students who miss a lab for an unexcused reason will lose 100% credit for that week. However, for an excused absence, proper medical documentation or university sanctioned event, proof must be provided. Then, your TA may offer a makeup lab at another time in the same week he/she runs the lab or arrange for a makeup lab in a section with another TA. However, you will be responsible to make the initial request to your instructor of record and TA, and to follow up with your TA to make sure you have received credit for your "Attendance Grade" in your section. Also, note that make-up labs are not always possible due to limited lab capacities.

Grading Scale: **A > 90%, B > 80%, C > 70%, D > 60%, F < 60%**

Grade Breakdown: Your grade will consist of the followings:

1. 33% Attendance. You must participate fully in the lab, and not come and go as you please!
2. 33% Online Pre-lab Quizzes and Post-lab Reports (Quizzes) posted on the Blackboard.
3. 17% In lab Midterm Exam (Safety to Diphenylacetylene & IR) and 17% Final Exam (Dibenzyl Ketone to Hexaphenylbenzene & NMR) Questions will be form Pre-Post lab Quizzes.

In-person Exams: You must attend your own lab section, (not any other section) on the day of your Exams. You must also bring your laptop to your exam sessions. Your exams start right at the start time of your lab and will be limited to 90 minutes duration; the lab will be closed after 90 minutes. So be sure to be present on time not to miss your exams!

Pre-Lab and Post-Lab Quizzes: Pre-Lab Quizzes open at 12 am on Saturday before the lab and close on Sunday of the same weekend at 11:59 pm. Post-Lab Reports open at 12 am on Saturday after the lab and close on Sunday of the same weekend at 11:59 pm so that students can concentrate on the lab at hand. Therefore, the weekends are allocated to the Pre-Lab Quiz of the coming experiment and the Post-Lab Report of the past experiment.

- The quiz/report questions are mostly multiple choice, multiple answer, or matching.
- Students will get **3 attempts and the last graded attempt**; however, 3 attempts are in place in case your internet connection goes out, so you have two more attempts to do the quiz.
- You will not be forced to complete a quiz/report once you start it, and there is no timer for it, however, you should save each question if you decide to stop working.
- After the due date, students can see the correct answers for the quiz/report.
- Quizzes/Reports Due Dates and Times are in MST.

Quizzes/Reports Description

- 3 attempts and the last graded attempt.
- No force completion and no timer for the quiz.
- Can see the correct answers to the quiz after the due date.

Note: The whole semester is the time to focus on securing a good grade by attending all the labs and doing all the quizzes on time. At the end of the semester nothing can be done to improve your grade!

Course Objectives

1. To perform a multiple step synthesis applying several important organic chemistry reactions and laboratory techniques. To do so, you must be familiar with the procedures and the underlying theory. Therefore, you must read and understand the entire chapter, not just the experimental procedure in a chapter.
2. To learn how to use analytical equipment hands on and interpret data
3. To know the potential dangers associated with of each chemical and laboratory procedure, and how to mitigate your risk.
3. To be able to draw the chemical structures of all starting materials, intermediates, and products, and to understand and draw the reaction mechanisms (e.g., addition, elimination, substitution, etc.) using the curved arrow notation.
4. Be able to apply a given mechanism to other reagents.
5. Understand the stereochemical consequences of each reaction (if applicable).
6. Understand whether a compound/reagent is oxidized or reduced.
7. Be able to calculate the yield of a product, and understand:
    a. structure to formula conversion
    b. formula to molecular weight conversion
    c. mL to grams via density and vice-versa
    d. grams to moles
    e. what is the limiting reagent?
    f. what is the stoichiometry of the reaction?
8. Understand why a particular procedure was followed.
9. Remember that this semester, this lab is your job.

Course Expectation: Students are expected to have read the experiment content in the Wilcox/Wilcox textbook in advance and prepared for the weekly Pre-Lab Quizzes, the Post-Lab Reports, and the lab activity of the day. On the first day you should have access to your 2125 Blackboard and eventually your Pre-Lab and Post-Lab Reports throughout the semester.

Important Items

- If a student misses a Pre-Lab Quiz or a Post-Lab Report, there is no way of making it up.
- It is the student's responsibility to check whether he/she has successfully submitted a quiz.
- It is strongly recommended **NOT** to wait for the last hour to submit your quiz.
- The last-minute excuses like 'Computer freeze' or 'Internet outage' will **NOT** be accepted.
- The instructor will **NOT** reopen a quiz once you failed to submit it on time or after the due date.
- No excuses will be accepted other than:
  - you (not family member) are seriously sick, and you have a letter from your physician.
  - you are participating in activities related to UTEP.
- If a student wishes to receive a "W" for the course, it is his/her responsibility to drop the course before the **drop date, 4/1/2022**.
- **The content of this syllabus is tentative and subject to slight variations**.

Scholastic Integrity

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Student Conduct and Conflict Resolution (OSCCR) for possible disciplinary action. To learn more, visit HOOP: Student Conduct and Discipline.

Technology Requirements

Ensure you have access to a web browser such as Microsoft Edge, Google Chrome, or Mozilla Firefox which works the best with Blackboard; other browsers may cause complications. Before you attempt to take a Blackboard quiz, ensure that you are on a stable internet connection (wired, preferably). If you encounter an issue during your quiz, try the following steps:

- Check your browser compatibility
- Update your browser
- Clear your history and cache

If you further encounter issues, please contact **Help Desk** and provide a screenshot, the CRN, and an explanation of what you are experiencing to help expedite the troubleshooting process.

Important Dates

- Jan 18th — Spring classes begin
- Jan 24th — Labs begin **in this week.**
- Feb 2nd — Census Day
- Mar 14-18th — Spring Break
- Mar 25th — Cesar Chavez Holiday – no classes
- Apr 1st — Drop/Withdrawal Deadline
- May 5th — Last day of classes
- May 6th — Dead day
- May 9-13th — Final Exams
- May 18th — Grades are Due

COVID-19 Precaution Statement

Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodations. If you have tested positive for COVID-19, you are encouraged to report your results to covidaction@utep.edu, so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID-19 testing.

The Center for Disease Control and Prevention recommends that people in areas of substantial or high COVID-19 transmission wear face masks when indoors in groups of people. **This is the case in the Organic Chemistry Teaching Lab; therefore, please follow the CDC's recommendation and wear a facial mask during the entire lab period, if possible, an N95 facial mask.** The best way that Miners can take care of Miners is to get the vaccine. If you still need the vaccine, it is widely available in the El Paso area, and will be available at no charge on campus during the first week of classes. For more information about the current rates, testing, and vaccinations, please visit epstrong.org.