

**CHEM 332**  
**Organic Chemistry Lab II**  
**FALL 2013**

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**Recitation:** Monday, 2:30 pm-3:20 pm; MG1099  
**Lab:** Wednesday, 2:30 pm-5:20 pm; MG1040

**Office Hours**

Tuesdays and Thursdays; 2-4 pm. Fridays; 9-11 am. Appointments can be made for times outside of office hours.

**Course Description**

Exploratory mechanistic and synthetic chemistry based on NMR and IR spectroscopy and modern synthetic methods.

**Textbook**

Padías. *Making the Connections*, 2<sup>th</sup> edition, Hayden McNeil, 2011.

**Expected Behavior**

CHEM 332 students are expected to abide by the student conduct code, available online at the following address; <http://saffairs.truman.edu/studentconductcode.asp>. Electronic devices that disrupt the class will not be tolerated. Communication devices shall be placed in quiet/vibrate mode or switched off. Phone calls shall not be placed or taken in class. Those who violate these rules will be required to leave the classroom.

**Academic Dishonesty Policy**

Students are expected to abide by the academic dishonesty and academic integrity policies established by Truman State University. Please see the following website for information regarding these policies; <http://conduct.truman.edu>.

**Grading**

|                       |     |
|-----------------------|-----|
| Pre-lab quiz          | 15% |
| Lab reports           | 40% |
| Products              | 10% |
| Midterm and Final     | 25% |
| Subjective evaluation | 10% |

## **Grading Scale**

| Final % | Letter Grade |
|---------|--------------|
| 90-100% | A            |
| 80-89%  | B            |
| 70-79%  | C            |
| 60-69%  | D            |
| <60%    | F            |

Final grades will be rounded up to the nearest whole number when the fractional value is greater than or equal to 0.5. For example, 89.5% would round to 90%. Final grades may be scaled, depending on the grade distribution.

## **Disabilities**

Please let Dr. Adams know as soon as possible if you have any special requirements in order to take this class. A note from the Disability Services office will be provided to Dr. Adams for special circumstances.

## **Absences/ Makeup Policy**

It is important that you attend every lab session and recitation. If you know in advance that you will miss a lab, please let me know as soon as possible so that we can make arrangements for you to make it up. A valid excuse for missing the lab or recitation must be provided. Valid excuses include the following, as well as those approved by Dr. Adams;

- 1) Absence due to a University sanctioned event. A written excuse will be required for this type of event. University sanctioned events are those activities in which students participate as recognized representatives of Truman State University and that are usually associated with academic credit or university funding. Examples of such activities are orchestral performances and intercollegiate athletics competitions. Most student organization activities do not fall into this category.
- 2) Personal absence. Personal absences are those absences that result from emergencies, illnesses, and other personal activities such as religious observances and most student organization activities.

## **Lab Rules**

**Notebook:** You will use a bound notebook with carbon copies to perform laboratory experiments. You will record all of your laboratory methods, data, and calculations in the notebook. Enough detail should be provided so that someone else could follow your notes and be able to understand the logic behind the experiment, as well as how to perform the experiment effectively. Carbon copies will be turned in for grading.

**Lab Preparation:** The handouts available on [chemlab.truman.edu](http://chemlab.truman.edu), as well as your textbook, are not allowed in the lab. You should have all the information needed to perform the experiment written in your notebook prior to arriving in the lab.

**Lab Report:** The lab reports that you turn in will consist of your lab preparation notes, data and calculations, and conclusions that should address expected versus actual outcomes as well as answers to any questions brought up by the lab. The write up will be recorded in the lab notebook. Lab reports are due at the following recitation, or the next lab period if there is no recitation.

**Quizzes:** A quiz will take place at the beginning of recitation. The quiz will be on the basics of the laboratory to be performed that week. If you have read the handout and prepared your notebook, you will do fine.

**Cleanliness:** Please be sure to keep your area clean, as well as your lab materials. The lab area should be as clean or cleaner when you leave than it was when you arrived.

### **Laboratory Safety/Attire**

Students will follow the safety procedures as outlined on the lab page found at the following link; [http://chemlab.truman.edu/Safety\\_Files/LabSafety.asp](http://chemlab.truman.edu/Safety_Files/LabSafety.asp). Students are required to wear pants/skirts that cover the legs fully, and closed-toed shoes that cover the whole foot. Lab coats are optional, but do provide protection to clothing as well as increased protection to the body. Students are also required to wear laboratory safety goggles at all times when working in the laboratory.

**Class schedule**

| DATE   | DAY | DESCRIPTION                         | Padías |
|--------|-----|-------------------------------------|--------|
| 26-Aug | M   | No Class                            |        |
| 28-Aug | W   | check in                            | 1-13   |
| 2-Sep  | M   | Labor Day- No Class                 |        |
| 4-Sep  | W   | Carbonyl Unknowns (Instrumentation) | 77-101 |
| 9-Sep  | M   | recitation                          |        |
| 11-Sep | W   | Multistep Synthesis (pt 1)          |        |
| 16-Sep | M   | recitation                          |        |
| 18-Sep | W   | Carbonyl Unknowns (reagents)        |        |
| 23-Sep | M   | recitation                          |        |
| 25-Sep | W   | Carbonyl Unknowns (reagents)        |        |
| 30-Sep | M   | recitation                          |        |
| 2-Oct  | W   | Multistep Synthesis (pt 2)          |        |
| 7-Oct  | M   | Mid-Term Exam                       |        |
| 9-Oct  | W   | Mid-Term Break- No lab              |        |
| 14-Oct | M   | recitation                          |        |
| 16-Oct | W   | Grignard (pt 1)                     | 32-35  |
| 21-Oct | M   | recitation                          |        |
| 23-Oct | W   | Grignard (pt 2)                     |        |
| 28-Oct | M   | recitation                          |        |
| 30-Oct | W   | Multistep synthesis (pt 3)          |        |
| 4-Nov  | M   | recitation                          |        |
| 6-Nov  | W   | Luminol Synthesis                   |        |
| 11-Nov | M   | recitation                          |        |
| 13-Nov | W   | Luminol chemilum/ TPCP aldol        |        |
| 18-Nov | M   | Final Exam                          |        |
| 20-Nov | W   | make-up day/check out               |        |