

# Syllabus for Physical Chemistry II Lab: CHEM 3155

## Spring 2009

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**Office Hours:** Please e-mail me with the *specifics* regarding why you want to meet before scheduling a meeting. I definitely prefer e-mail (which would be answered as soon as possible), but you may also call my office and leave a *detailed* message.

**Introduction:** Physical chemistry is concerned with the physical principles underlying the properties of chemical substances. In order to learn physical chemistry, a student must become familiar with the experimental foundations on which the theoretical principles are based. Generally, the ability to utilize the principles requires an intimate knowledge of experimental techniques. For this reason, the lecture course in physical chemistry is accompanied by this laboratory course.

**Instructional Materials:** The only required materials for the lab is a **bound** 8"x10" notebook with cross-lined pages and safety goggles.

### Laboratory Requirements

- Prerequisites for this laboratory course are concurrent enrollment in Physical Chemistry 3354, familiarity with basic experimental techniques and operations, and knowledge of word processors and spreadsheets.
- **Safety glasses must be worn in the laboratory at all times!** Physical chemistry students have a bad habit of believing that they are advanced chemists and no longer need to follow safety rules. NOT TRUE! Many of the experiments have the potential to cause serious injury.
- You **MUST** keep a laboratory notebook, which will be a **COMPLETE** record of all experiments done. All procedures, data, calculations, and observations should be written directly in the notebook. I will periodically inspect the notebooks.
- The class will often work together as teams. However, each individual must submit his/her own original lab report and is responsible for all of the gathered experimental data. A short introduction to the experiment will take place at the beginning of the lab period, and there **may be a pre-lab quiz**.

- **If required**, I may go through a short introduction to **two** experiments within the first hour –half of you will begin with experiment 1 and the other half with experiment 2. Once completed (hopefully within 2 weeks), the two groups will switch experiments for the next week or two.
- A formal, word-processed report is to be prepared and submitted within one week after each experiment is completed unless stated otherwise. Late reports will be penalized with a 1/3 letter grade deduction per day late.
- The report grades will be based on report formatting, completeness and clarity of presentation, literature research and understanding of the theory involved in the experiment, experimental results, and discussion of error and conclusions. **Reports require a minimum of five literature references. At least one of these references must be from a primary literature source.**

## Grading

80% --- Laboratory Reports

10% --- Pre-lab quizzes

10% --- Lab technique, work ethics, professional attitude

**Grade Replacement:** If you are repeating this course for a grade replacement, you must file an intent to receive grade forgiveness with the registrar by the 12th day of class. Failure to file an intent to use grade forgiveness will result in both the original and repeated grade being used to calculate your overall grape point average. You will receive grade forgiveness (grade replacement) for only three course repeats during your career at UT Tyler (refer to catalog).

**Student Academic Conduct:** You are encouraged to study and to prepare for examinations with other students. However, when taking examinations, you are to work alone. Under **NO** circumstances will cheating be tolerated. The minimum penalty for cheating will be a zero on the exam in question. Maximum penalties, up to university expulsion will be pursued in extreme or repeat cases. You should help enforce this code. Please tell me if you see someone cheating. Students are encouraged to obtain a copy of *A Student Guide to Conduct and Discipline at UT Tyler*, available in the Office of Student Affairs.

**Disability Statement:** If you have a disability, including a learning disability, for which you request an accommodation, please contact Ida MacDonald in the Disability Support Services office so that the appropriate arrangements may be made. In accordance with federal law, students requesting accommodation must provide documentation of his/her disability to the Disability Support Services counselor. For more information, call or visit the Student Services Center located in the University Center, Room 282. The telephone number is 903-566-7079.