

## CHMY 142 Fall 2009

**INSTRUCTOR:** Dr. Laura Tayer                      **OFFICE:** Sci 226  
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**OFFICE HOURS:** MWF 9:00-10:00, MW 1:00-2:00 or by appt

### OUTCOMES AND ASSESSMENT:

Chemistry 142 is a laboratory course designed to enable you to develop your analytical skills as well as introduce you to laboratory practices and techniques. As far as possible, concepts learned in the lecture course (CHMY 141) will be used here. This will be assessed by graded weekly report sheets, weekly quizzes, graded lab note books, comprehensive final and instructor evaluation of lab performance.

### REQUIRED MATERIALS:

1. Lab Manual - Experiments in General Chemistry I, 4<sup>th</sup> ed. Billings: MSU-Billings, 2009.
2. **SAFETY GOGGLES!!!!** These are mandatory. You will not be allowed in lab without them.
3. Lab Note Book - A **bound** notebook, either composition or quad rule.

### GRADING:

1. **Prelab questions** - These are to be turned in at the beginning of each lab period and are worth 5 pts. each.
2. **Report Sheets** - These are to be turned in by **2:00 pm** two days after the lab is completed (e.g. for Monday's lab section the report sheet is due Wednesday at 2:00 pm). The report sheets are worth 15 pts each.
3. **Quizzes** - There will be a quiz every week at the beginning of the discussion session. Half the quiz will test procedural understanding of the experiment scheduled for that day. The other half of the quiz will test conceptual understanding of the previous weeks experiment. The quiz will be worth 10 pts.
4. **Lab Note Book** - Keeping a lab note book is required. For each experiment, data and observations will be recorded directly in the note book and then transferred to the report sheet. The note book will be randomly collected 3 times during the semester and is worth a total of 30 pts.
5. **Lab final** - A final worth 50 pts will be given the last lab period of the semester.
6. **Evaluation** - The instructor will evaluate performance in lab worth 25 pts.
7. The grading scale will be as follows although it may be curved at the end of the semester ( I reserve the right to give +/- grades to borderline cases)

- A 90 and above
- B 80-89
- C 70-79
- D 60-69
- F 59 and below

Late labs will have a minimum of 3 points deducted from the lab report total. A late lab will no longer be accepted one week after the lab was originally due.

There will be an opportunity to make up missed labs Monday Nov. 23 and Tuesday Nov. 24 sign-up is required. You must have an excused absence from the instructor if you want to make up the experiment.

### Lab Schedule

<u>week of</u>	<u>lab</u>
Sept. 14	Check in/ Exp. 1 (Density)
Sept. 21	Exp. 2 (Chromatography)
Sept. 28	Exp. 3 (Determination of Chemical Formula)
Oct. 5	Exp. 5 (Developing Solubility Rules)
Oct. 12	Exp. 4 (Synthesis of $K_3Fe(C_2O_4)_3 \cdot 3H_2O$ )
Oct. 19	Exp. 7 (Analysis of an Unknown Chloride)
Oct. 26	Exp. 10 (Molar Mass of Volatile Liquid)
Nov. 2	Exp. 6 (Heat Effects and Calorimetry)
Nov. 9	No Lab
Nov. 17	Exp. 8 (Acid-Base Titration)
Nov. 23	No Lab
Nov. 30/Dec. 1	Exp. 9 (Colorimetric Determination of Copper)
Dec. 7	Lab Final/check out

**\*\*You must check-out of your lab drawer. Failure to do so results in a \$20 check-out fine\*\***

**The MATERIAL SAFETY DATA SHEETS (MSDS)** for any chemical used in this laboratory can be found in the MSDS red binders located in Science Technical Services (STS) in Sci 241. These sheets contain information on hazards associated with the chemical as well as information on its proper handling and storage.

**POLICY ON ACADEMIC HONESTY:** It is your responsibility to familiarize yourself with the Student Handbook. In particular, you should understand Part IX: Code of Conduct, paying special attention to subsection B.1, page 78 (Academic Misconduct). All students are expected to adhere to the highest standards of academic honesty and refrain from any action that is dishonorable or unethical. In all examinations, quizzes, and lab reports, students are expected to submit their own work entirely. Cheating or *alleged* cheating on an exam or quiz in this class will result in a grade of zero (failure) for the exam or quiz involved, and may lead to a zero in the course.

**POLICY ON STUDENT CONDUCT:** Disruptive behavior such as loudly talking amongst yourselves, using cell phones, talking or texting on cell phones, and reading non-course material during discussion or in lab will not be tolerated. Any students indulging in such behavior will be asked to leave. Cell phones must be turned off during lecture.

Occasionally, a student will have a disagreement with the professor or with the teaching assistants over an issue of grading. Such discussions, whether in class or in office, are to be kept civil. Verbal abuse in any form will not be tolerated. Any student indulging in such behavior will be reported to the Dean of Arts and Sciences and the Office of Student Affairs.