

# General Chemistry I Laboratory

## Course Syllabus - Fall 2010

**Course:** General Chemistry I Recitation/Laboratory, CHEM. 1112

**Course Description:** Concentration on basic chemistry laboratory operations, chemical and physical changes, data collection, interpretation and reporting of results. Laboratory work will emphasize safety, reliability of results, use of chemical literature, laboratory calculations, and familiarity with laboratory equipment.

**Prerequisites:** Concurrent enrollment in CHEM 1103 is required.

**Instructor:** Dr. Mike Jezercak **Office:** H 320 C **E-mail:** [drjez@uco.drjez.com](mailto:drjez@uco.drjez.com)

**Office Hours:** 10:00 a.m.-10:50 a.m. M, W, F and 8:00 a.m.- 9:00 a.m. Tues and by Appt.

**Course Objectives:** Students, upon completion of this course, will have gained exposure and practice in basic laboratory techniques and safety. Students will also reinforce chemical theory obtained in lecture.

**Class time:** 1:00 p.m. - 4:50 p.m. Monday

**Course Text (Required):** Package by Prentice-Hall.

**Evaluation:** Final grades will be based on the results of quizzes, laboratory assignments and exams. In the event of an illness or emergency, one lab grade and one quiz grade may be discarded. An absence on a lab or quiz will be construed as such. No other grades will be discarded and there will be no make-up labs or exams. Final grades will be based on a weighted distribution based on the following:

<b>Weighting:</b>		<b>Grade Distribution:</b>
Laboratories	30%	A = 85%
Pre-Labs and Prelaboratory Quizzes	30%	B = 70%
Mid-Term Examination	20%	C = 55%
Final Examination	20%	D = 40%

**Audit:** Students desiring to audit this course will be assessed a satisfactory grade by maintaining a letter grade of "C" or better.

**Attendance:** Attendance to all classes is expected. No make-up laboratories, exams or quizzes will be given.

**Additional:** A comprehensive list of University Policies and statements and other additional information is available at: <http://www.drjez.com/uco/StudentInfoSheet.pdf>

**Quality of Written Work:** All submitted assignments, quizzes and exams must conform to standards discussed in class and in the provided handout and example. **Work not adhering to strict standards of neatness, organization and grammar will not be graded and will subsequently be marked as missing.** Students unable to conform to minimum standards may be required to attend writing skills courses administered by the Learning Resource Center in order to continue in the class.

**Schedule:**

<b>Week of</b>	<b>Laboratory Experiment</b>
August 23	Check-in, Safety, Measurements
August 30	Physical Properties
September 6	Dimensional Analysis ( <b>Except Monday Labs</b> )
September 13	Chemical Nomenclature
September 20	Formula and Composition of a Hydrate
September 27	Chemical Formulas
October 4	Types of Chemical Reactions
October 11	<b>Mid-Term Exam, Written</b>
October 18	Copper Reactions, Conservation of Matter
October 25	Gravimetric Determination of Phosphorus in Plant Food
November 1	Specific Heat
November 8	Specific Heat
November 15	Molecular Models and Covalent Bonding
November 22	<b>Thanksgiving Break No Labs this week</b>
November 29	Evaluation of the Gas Law Constant
December 8	<b>Lab Final, Written and Practical</b>

- Laboratories will be completed and due by the end of the laboratory period.
- Proper laboratory conduct is essential. Unauthorized experimentation will not be tolerated. Laboratory goggles will be required at all times. Students failing to comply will be asked to leave or to withdraw from the lab.
- A laboratory assistant will be present to help answer questions and to assist with equipment and chemicals. This assistant has authority in the lab and is fully supported by the instructor, which has *the* authority in the lab.
- **Laboratory work is required to be neat and consistent with university quality work in all ways including grammar and syntax. Calculations are required to be complete, showing work for 1 complete set of data, and must include appropriate significant figures and units. Work not living up to a reasonable quality will not be graded.**
- For your information, Material Safety Data Sheets (MSDS) are located at a Right-to-Know station in the laboratory.
- Each individual is responsible for equipment in their possession. Insure that equipment is properly put away and the laboratory drawers and work areas are clean. This includes maintaining cleanliness of reagent chemicals and laboratory balances.
- The greatest hazard to laboratory success and an important safety issue is the contamination of chemicals. Always strive to maintain reagent cleanliness at all times. Utilize techniques taught. The instructor reserves the right to reduce a laboratory grade based on poor laboratory technique or cleanliness.