

Introductory Chemistry Laboratory 1105 A

Spring 2011

Contact Information

Instructor: Nichole Jackson

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Office Hours: MW 9:30 – 10:00 AM; M 2:00 – 5:00 PM

TTH 9:30 – 11:30 AM; TH 1:30 – 3:30 PM

Course Information

Department: Physical Sciences

Start Date: 01/18/2011

End Date: 05/13/2011

Modality: Face-to-Face

Credits: 1 hour

Lab: TTH 8:00 – 9:20 AM

Required Reading/Materials

Burns, Fundamentals of Chemistry in the Laboratory, 4th Ed, Prentice Hall

Courses Prerequisites

Course Corequisite: CHEM 1305

SCANS

1, 3, 6, 8, 9

Course Description

A laboratory course illustrates and reinforces principles and concepts of CHEM 1305 by use of quantitative experiments and demonstrates some real world applications.

Course Objectives & Learning Outcomes

The objective is to gain working knowledge in handling scientific equipment safely and emphasize interpreting and reporting data in the scientific format.

Upon completion of this course, students will:

- (1) understand safety in a laboratory
- (2) understand how simple chemical reactions happen
- (3) know how to name and write formulas for simple compounds
- (4) understand physical and chemical properties of simple compounds

Students with Disability

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the ADA of 1990. Students with special needs or issues pertaining to access and participation in this class must contact me immediately. Further, you may call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

Cell Phone

When class begins, all phones need to be on silent or vibrate. If it is necessary for you to answer your phone or text message, then you need to step out into the hallway. If you consistently text message while in class, you will be asked to leave the lab. Your phone **cannot** be used as a calculator on exams.

Course Grade

| | |
|-------------------|-----|
| Reports | 70% |
| Mid-semester Exam | 15% |
| Final Exam | 15% |

Pre-lab Exercises:

Before coming to lab that week, read through the procedure for the specific experiment and outline it on one of the handout sheets that was given. This exercise for each experiment is due when you come to the laboratory and must be completed **before** you can enter the laboratory. They will be worth 10 points of your report grade.

Reports

Report sheets with the experimental data, calculations, and assigned post laboratory questions will be due at the beginning of the following Thursday laboratory. These pages should be legible and problems should show units and logic. Points will be deducted for late papers turned in after this deadline. Papers more than 2 class days late will **NOT** be accepted unless special permission has been obtained. Points will also be deducted for unsafe conduct in the laboratory.

Missed Laboratory Sessions

You are responsible for making up any missed laboratory sessions. This must be done **before** the laboratory supplies are put away. Be sure to make arrangements with your instructor on make-ups. The laboratory report is still due at the same time as the rest of your class. If you can't make-up the lab before it is disassembled, special arrangements may have to be made. Remember the mid-semester exam and final exam will include information from laboratories that you have missed. **You will only be allowed to make up 2 missed experiments** regardless of the reasons.

Mid-Semester Exam: Covers the experiments of the first half of the semester. The test will have a short practicum with the rest of the exam being short answer format similar to the pre and post lab questions.

Final Exam: Covers the experiments of the second half of the semester. The test is short answer format, similar to the pre and post lab questions.

Learning Resource Center (Library)

The Library, known as the [Learning Resources Center](#), provides research assistance via the [LRC's catalog \(print books, videos, e-books\)](#) and [databases \(journal and magazine articles\)](#). [Research guides](#) covering specific subject areas, [tutorials](#), and the ["Ask a Librarian"](#) service provide additional help.

Student E-mail

Please access your [Odessa College Student E-mail](http://www.odessa.edu/gmail/), by following the link to either set up or update your account: <http://www.odessa.edu/gmail/>. **All assignments or correspondence will be submitted using your Odessa College email.**

Student Portal

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Technical Support

For Blackboard username and password help and for help accessing your online course availability and student email account contact the Student Success Center at 432-335-6878 or online at https://www.odessa.edu/dept/ssc/helpdesk_form.htm.

Important School Policies

For information regarding student support services, academic dishonesty, disciplinary actions, special accommodations, or student's and instructors' right to academic freedom can be found in the [Odessa College Student Handbook](#).

LABORATORY ASSIGNMENTS**1105**

| Date | Experiment | Experiment Description | Post-lab Quest. |
|------------------|---|--|--|
| 1/18 | Check-Out, Safety Rules | | |
| 1/20 | Math Review | Math skills needed for the lab. | Handout |
| 1/25 (2 days) | Exp. #2 Measurement and Conversions | Work individually; Omit 3c | p. 15 #1-7 |
| 2/1 (2 days) | Density | Work in pairs; <u>Handouts</u> from instructor | In your workbook: p. 22 # 1-3 p. 25 # 1-4 |
| 2/8 (2 days) | Physical and Chemical Properties | Can work in pairs: <u>Handouts</u> from instructor | On handouts: p. 65 # 1-4 |
| 2/15 (2 days) | Exp. # 4 Separation of a Mixture | Can work in pairs; | p. 31 # 1-4 |
| 2/22 (2 days) | Nomenclature | <u>Handouts</u> from instructor; classroom | All problems |
| 3/1 (2 days) | Empirical Formula | Can work in pairs; <u>Handouts</u> from instructor | p. 137 # 4,5,7 p. 141 # 1-6 |
| 3/8 | Review for Mid-semester Exam | Classroom | |
| 3/10 | Mid-semester Exam | Will cover labs of 1 st half | |
| 3/15 -17 | NO LAB | SPRING BREAK!!!!!! ENJOY!!!! | |
| 3/22 (2 days) | Exp. # 12 Ionic Reactions | Can work in pairs | p. 91 # 1-7 |
| 3/29 (2 days) | Exp. #13 Chemical Reactions | Classroom | p. 94 – p. 97 |
| 4/5 (2 days) | Exp. #14 Prep of Alum | Can work in pairs | p. 107 # 2,3 |
| 4/12 (2 days) | Testing for Vitamin C | Can work in pairs; <u>Handouts</u> from instructor | Handout problems |
| 4/19 (2 days) | Lewis Structures/ Molecular Geometry | Classroom; <u>Handouts</u> from instructor | Handout problems |
| 4/26 (2 days) | Exp. #21 % of Acetic Acid | Can work in pairs | p. 151 #1-5 |
| 5/3 | Review for Final Exam | Check-In equipment | |
| 5/5 | Final Exam | Will cover second half of semester's experiments | |

Good Luck this Semester!!!!!!