

# *Introductory Chemistry Laboratory 1105 A*

Fall 2012

## **Contact Information**

Instructor: Nichole Jackson

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Office Hours: M 2:00 – 5:00 PM

TTH 8:30 – 9:30 AM

W 8:00 – 9:00 PM

W 2:00 – 4:00 PM

TH 1:30 – 3:30 PM

## **Course Information**

Department: Physical Sciences

Start Date: 08/28/2012

End Date: 12/13/2012

Modality: Face-to-Face

Credits: 1 hour

Lab: TTH 9:30 – 10:50 AM

## **Required Reading/Materials**

Burns, Fundamentals of Chemistry in the Laboratory, 4<sup>th</sup> Ed, Prentice Hall

## **Courses Prerequisites**

Course Corequisite: CHEM 1305

## **ICOs**

1, 2, 3

## **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.

## **\*\*Expectations for Engagement – Face to Face Learning**

Still apply for the lab as well as the lecture

### **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](#), 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**

Please access your [Odessa College Student E-mail](#), 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.**

### **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](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.
8/28	Check-Out, Safety Rules		
8/30	Math Review	Math skills needed for the lab.	Handout
9/4 (2 days)	Exp. #2 Measurement and Conversions	Work individually; Omit 3c	p. 15 #1-7
9/11 (2 days)	Density	Work in pairs; <u>Handouts</u> from instructor	<b>In your workbook:</b> p. 22 # 1-3 p. 25 # 1-4
9/18 (2 days)	Physical and Chemical Properties	Can work in pairs: <u>Handouts</u> from instructor	On handouts: p. 65 # 1-4
9/25 (2 days)	Exp. # 4 Separation of a Mixture	Can work in pairs;	p. 31 # 1-4
10/2 (2 days)	Nomenclature	Handouts from instructor; classroom	All problems
10/9 (2 days)	Empirical Formula	Can work in pairs; <u>Handouts</u> from instructor	p. 137 # 4,5,7 p. 141 # 1-6
10/16	Review for Mid-semester Exam	Classroom	
10/18	Mid-semester Exam	Will cover labs of 1 <sup>st</sup> half	
10/23 (2 days)	Exp. # 12 Ionic Reactions	Can work in pairs	p. 91 # 1-7
10/30 (2 days)	Exp. #13 Chemical Reactions	Classroom	p. 94 – p. 97
11/6 (2 days)	Exp. #14 Prep of Alum	Can work in pairs	p. 107 # 2,3
11/13 (2 days)	Testing for Vitamin C	Can work in pairs; <u>Handouts</u> from instructor	Handout problems
11/20	Ozone in the Atmosphere	Web-based activity; <u>Handouts</u> from instructor	
11/27 (2 days)	Lewis Structures/ Molecular Geometry	Classroom; <u>Handouts</u> from instructor	Handout problems
12/4	Review for Final Exam	Check-In equipment	
12/6	Final Exam	Will cover second half of semester's experiments	

**Good Luck this Semester!!!!!!**