

Course Syllabus

Department : Physical Sciences
Course Title : General Inorganic Chemistry I Lab
Section Name : CHEM_1111 (B&C)
Scheduled : Monday, and Thursday _ 1:00PM - 3:50PM
Start Date : 08/22/2011
End Date : 12/01/2011
Modality : FACE-TO-FACE
Credits : 1

Instructor Information

Name : Robert A. Morris
OC Email : rmorris@odessa.edu
OC Phone # : (432) 335-6596

Course Description

A laboratory course that illustrates and reinforces principles and concepts of CHEM 1311 through the use of qualitative and quantitative experiments that emphasizes interpreting and reporting of data. The student will focus on handling scientific equipment.

Prerequisites/Co requisites

Co requisite: CHEM 1311

Scans

1, 3, 6, 8, 9

Course Objectives

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 the kinetics of how fast a reaction will occur
 - (3) Be able to interpret titration curves
 - (4) Be able to use problem-solving skills to determine an unknown
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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.

Pre-lab Exercises:

Before coming to lab that week read through the procedure for the specific experiment and outlines 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 makeup 2 missed experiments** regardless of the reasons.

Required Readings/Materials

You must purchase the following **required** readings/materials:

Taylor & Russell, Chemistry1111, Odessa College, Department of Chemistry

Course Requirements (Lectures, Assignments and Assessments)

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.

Topic/Overview: This week focuses on

LABORATORY ASSIGNMENTS FOR MONDAY

Date	Experiment	Experiment Description	Post-lab Quest.
8/22	Check-out, Safety Rules, Math Review	Math skills needed for the lab.	None
8/29	Exp. # 3 Measurement and Conversions	Parts to be omitted are: 2-B, 3-B, D; work individually	p. 45 # 4, 6 p. 53 # 3, 4
9/5	NO LAB	LABOR DAY!!!!!! ENJOY!!!!!!	NONE
9/12	Exp. #4 Density	Omit parts: A-2, B #14, C #16, 17, 18, 21, 22; work in pairs	p. 58 # 5,7 p. 66 # 5, 9,10
9/19 (2 days)	Exp. # 1 Separation of a Mixture	Omit plant pigments; work in pairs	p. 31 # 1,2, 7 p. 37 # 4, 5
9/26 (2 days)	Exp. # 12 Empirical Formula	All groups will do section II, oxide of magnesium; work in pairs	p. 133 # 4,5,6,7 p. 139 # 4,5,6
10/03 (2 days)	Exp. # 2 Inorganic Nomenclature	All parts of assigned sheet.	p. 41 #1 – 40 p. 42 # 1 – 40
10/10	Exp. # 10 Formula of a Hydrate	Do all parts; work in pairs	P. 115 # 1,5 Questions Handout
10/17	Mid-semester Exam	Will cover labs of 1 st half, through Exp. 10.	
10/24 (2 days)	Exp. # 13 Chemical Reactions	Do part B only; work in pairs.	p. 145 # 7,8,9
10/31	Exp. # 5 Conservation of Matter	Do all parts.	p. 77 # 2,3,4,5,6,7
11/07	Exp. # 9 Atomic Structure	All parts.	p. 109 # 1 – 5 p. 111 # 1 – 4
11/14	Exp. # 11 Molecular Geometry	Assigned parts of pre-lab and problems assigned on data sheet.	Complete assigned problems and p. 125 # 1-8
11/21 (2 days)	Exp. # 14 Acid - Base Titration	All parts; work in groups of three	p. 159 #4,5 p. 165 #1,2,3,4
11/28	Final Exam	Check-in equipment	

LABORATORY ASSIGNMENTS FOR THURSDAY

<u>Date</u>	<u>Experiment</u>	<u>Experiment Description</u>	<u>Post-lab Quest.</u>
8/25	Check-out, Safety Rules, Math Review	Math skills needed for the lab.	None
9/01	Exp. # 3 Measurement and Conversions	Parts to be omitted are: 2-B, 3-B, D; work individually	p. 45 # 4, 6 p. 53 # 3, 4
9/05	NO LAB	LABOR DAY!!!!!! ENJOY!!!!!!	NONE
9/08	Exp. #4 Density	Omit parts: A-2, B #14, C #16, 17, 18, 21, 22; work in pairs	p. 58 # 5,7 p. 66 # 5, 9,10
9/15 (2 days)	Exp. # 1 Separation of a Mixture	Omit plant pigments; work in pairs	p. 31 # 1,2, 7 p. 37 # 4, 5
9/22 (2 days)	Exp. # 12 Empirical Formula	All groups will do section II, oxide of magnesium; work in pairs	p. 133 # 4,5,6,7 p. 139 # 4,5,6
9/29 (2 days)	Exp. # 2 Inorganic Nomenclature	All parts of assigned sheet.	p. 41 #1 – 40 p. 42 # 1 – 40
10/06	Exp. # 10 Formula of a Hydrate	Do all parts; work in pairs	P. 115 # 1,5 Questions Handout
10/13	Mid-semester Exam	Will cover labs of 1 st half, through Exp. 10.	
10/20 (2 days)	Exp. # 13 Chemical Reactions	Do part B only; work in pairs.	p. 145 # 7,8,9
10/27	Exp. # 5 Conservation of Matter	Do all parts.	p. 77 # 2,3,4,5,6,7
11/07	Exp. # 9 Atomic Structure	All parts.	p. 109 # 1 – 5 p. 111 # 1 – 4
11/14	Exp. # 11 Molecular Geometry	Assigned parts of pre-lab and problems assigned on data sheet.	Complete assigned problems and p. 125 # 1-8
11/21 (2 days)	Exp. # 14 Acid - Base Titration	All parts; work in groups of three	p. 159 #4,5 p. 165 #1,2,3,4
12/01	Final Exam	Check-in equipment	

Grading Policy

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| 1. Reports will be: | 70% of your grade. |
| 2. Mid-semester Exam will be: | 15% of your grade. |
| 3. Final Exam will be: | 15% of your grade. |

Percentage %	Grade
89.5	A
79.5	B
69.5	C
59.5	D
<59.5	F

Special Needs

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please feel free to contact me to discuss your concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

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.

Important School Policies

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