**CHEMISTRY 111L PRINCIPLES OF CHEMISTRY FALL 2013**

**LABORATORY SYLLABUS**

**Course Info and Policies**

**Instructor:** Dr. Richard A. Himes  
Office: 110 SSMB  
**e-mail:** himesra@cofc.edu  
**Phone:** 953-3618

**Office hours:** T: 1:45-2:45 pm; W: 1:30-3:00 pm; Th: 11 am – 12 pm; OR by appointment (but usually, if my office door is open, I'll take some questions!)

**Lab meetings:** 1 – 4 pm, Friday. Location: 145 SSMB

**IMPORTANT DATES:** Aug. 26: Last day to Drop/Add  
Oct. 12-15: Fall Break (no class)  
Oct. 17: Mid Term grades available  
Oct. 24: Last day to withdraw with grade of ‘W’  
Nov. 27 – Dec. 1: Thanksgiving holiday (no class)

**MIDTERM EXAM:** Oct. 11 (covering Experiments 1-5).

**FINAL EXAM:** Nov. 22 (covering Experiment 6-10).

**Required text:** Chemistry 111L Principles of Chemistry Laboratory Manual (MUST be brought to lab each week.)

**Required supplies:** Lab coat, safety goggles or glasses, gloves (non-latex – either vinyl or nitrile)

**Required attire:** Long pants covering entire leg, closed-toe shoes (no heels) covering entire foot.

**Co-requisite:** You must be registered for CHEM 111 lecture concurrently. Withdrawing from *either* the lecture or lab course requires withdrawing from both courses.

**Attendance:** Attendance at all lab meetings is mandatory. There is no guarantee of a make-up lab, even with a legitimate excuse. You may try to contact another laboratory instructor to see if they have space to let you make up a lab. A lab can only be made up the SAME WEEK it is scheduled. You must inform both your current instructor and the make-up instructor by email. Missing a laboratory period for any unexcused reason will result in a zero for that lab. You will not be allowed to enter the lab if you do not have proper attire. Dismissal due to improper attire will result in a zero for that week’s lab.

**Safety Rules:** Failure to adhere to the safety rules found in the laboratory manual, or to follow additional safety instructions given by the instructor, will result in dismissal from the laboratory with a grade of zero for that laboratory period.

The safety guidelines are outlined in the manual but there are several rules that will be of paramount importance:

1. No shorts
2. No sandals, flip flops, or other open-toed shoes
3. Goggles must be worn at all times when chemicals are in use
4. Laboratory coats must be worn at all times
5. Gloves must be worn when handling chemicals

**Lab notebooks:** The laboratory manual for CHEM 111L contains notebook pages for use during the experiments. Therefore, you must bring this manual to each lab meeting. ONLY data and observations recorded on the lab manual notebook pages will receive credit. ONLY data and observations recorded in the lab manual notebook pages may be used for lab reports.

**Lab reports:** The format for lab reports, which is discussed in the laboratory manual, needs to be followed. In addition to the lab report, a typed abstract is required. The abstract will be discussed at the first lab meeting. Please consult the lab manual for description and samples of abstracts. Laboratory reports along with abstracts will be due immediately at the beginning of the following laboratory period. Any laboratory reports received after completion of the pre-lab quiz will be considered late and immediately lose half credit. After completion of the following lab, late lab reports may be given a zero.

**Quizzes:** Pre-lab quizzes will be given throughout the semester at the beginning of class. The purpose of quizzes is to encourage you to prepare for lab. No make-up quizzes will be given. The lowest quiz score will be dropped.

**Exams:** A midterm and a final exam will be administered (dates above). Each exam will cover concepts, lab techniques and other material from the lab experiments in this course. The midterm covers experiments 1-5; the final, experiments 6-10. There will be no experiments on exam days.
Academic integrity: This course is conducted under the Honor Code of the College of Charleston [http://www.cofc.edu/studentaffairs/HonorBoard/HonorBoard.htm]. Review the Department of Chemistry and Biochemistry’s policy on Scientific Integrity [http://www.cofc.edu/~chem/advising/integ.pdf].

Course Topics and Details

Course Description: A laboratory course designed to introduce the student to the application of the scientific method in solving chemical problems and to acquaint him or her with specific tools and techniques used in the chemistry laboratory, while reinforcing and illustrating concepts encountered in lecture.

Learning Outcomes: The student who completes this course will have gained the ability to:
1. Develop an understanding of the scientific method in a chemistry laboratory setting.
2. Practice mathematical manipulations using acquired data.
3. Interpret scientific data.

Chemistry 111L Fall 2012 Schedule

August 23 Course Overview and Safety Presentation
August 30 Experiment 1
September 6 Experiment 2
September 13 Experiment 3
September 20 Experiment 4
September 27 Experiment 5
October 4 Experiment 6
October 11 Midterm Exam (Experiment 1-5)
October 18 NO LAB
October 25 Experiment 7
November 1 Experiment 8
November 8 Experiment 9
November 15 Experiment 10
November 22 FINAL EXAM, covering Expts. 6-11. Last 111L meeting.

Course Performance and Evaluation

Grades: Material that will count toward your final grade includes the laboratory reports, pre-lab quizzes, and the two (midterm and final) exams. The department-wide grading formula and grading scale for the course follow:

<table>
<thead>
<tr>
<th>Formula:</th>
<th></th>
<th>Grading Scale:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab reports:</td>
<td>65%</td>
<td>A 93-100%</td>
</tr>
<tr>
<td>Quizzes:</td>
<td>10%</td>
<td>B- 80-82%</td>
</tr>
<tr>
<td>Midterm exam:</td>
<td>12.5%</td>
<td>C+ 78-79%</td>
</tr>
<tr>
<td>Final exam:</td>
<td>12.5%</td>
<td>D 71%</td>
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Lab notebooks and lab reports: Lab notebook pages are included in the lab manual. The notebook pages are for recording what you do, observe, and measure while in lab. Do not re-copy the experimental procedure into the notebook pages; you must record what you do, as you do it. All data and observations needed for the lab report must be recorded in the notebook pages during lab time. Lab notebooks MUST be initialed by the instructor before you leave lab; failure to have your notebook checked by the instructor could result in a zero for that lab. Read the lab manual section on proper use of notebook pages. Using data that you yourself (or with a partner) did not collect for a lab report is a form of cheating. NO data or observations are to be entered into the lab report section during experiments. You are to finish the lab report on your own time, using your observations and data from your notebook. Lab report sections will be checked by the instructor when you finish the experiment. Entries made in the lab report section during the lab period will have points deducted.

CLEANLINESS: Lab benches and hoods MUST be kept clean. Benches, hoods, and glassware must be cleaned before leaving the lab. You MUST have the instructor check your lab space for cleanliness before being excused from lab. Leaving a messy lab space will result in both lab partners losing points on that week’s lab report!

Each week, one or pairs of lab partners will be responsible for checking the cleanliness of the lab following the experiment. This task, along with general cleanliness each week, will be factored into the lab report grades as 5% over the overall grade.