

## General Chemistry I Laboratory CHM 1045L

The following items are required for this course. They can be purchased at FIU Book Store. **It is important that you have all the required items with you plus the pre-lab write-up when you show up for each experiment. See page 6 in you lab book for prelab assignment.**

1. General Chemistry I Laboratory Manual, 1998, Staff
  2. A bound notebook with original/duplicate numbered pages.
  3. A calculator with logarithm function.
  4. A black or blue ball point pen and a student ruler.
  5. Graph paper (National brand, #12-282: 20 squares per inch, or #12-188: 10 millimeters to a centimeter)
  6. A pair of safety goggles and protective clothing including long sleeves, pants, socks and shoes that cover the TOP of the foot. Do not wear good clothes to the lab. **Students won't be allowed in lab without goggles or proper clothing. Note: Ballet flats and corks are NOT ACCEPTABLE shoes.**
- Goggles may be purchased from the Chemistry Club in CP 356.

<u>Exp #</u>	<u>Dates</u>	<u>Experiments</u>	<u>Pages</u>
	Aug. 22 – 26	Check-in: Safety rules, General Instructions, & Excel Lab	2-12
1	Aug. 29 – Sep. 2	Properties and Changes of Matter	14
2	Sep. 6 - 12	Pipet Calibration and Density of a Liquid	17
3	Sep 13 - 19	Determination of Water of Hydration of a Compound	21
4	Sep. 20 – 26	Investigation of a Powder	24
5	Sep. 27 - Oct. 3	Percent of Oxygen in a Compound - Stoichiometry/Catalysis <b>** Due Oct. 11 - 17</b>	27
6	Oct. 4 - 10	Which Compound? Stoichiometry and Limiting Reagent	30
7	Oct. 11 - 17	Qualitative Analysis of Some common Ions	34
8	Oct. 18 – 24	Conductivity of Aqueous Solutions	38
9	Oct. 25 – 31	Charles Law (see calendar for Mon. sections)	41
10	Nov. 1 - 7	Molar Volume of a Gas	44
(Nov. 8 <sup>th</sup> - 11 <sup>th</sup> – no lab) – Nov. 11 <sup>th</sup> is veteran's day			
Handout	Nov. 14 - 18	TBA	
	Nov. 28 – Dec. 2	Check-out: Teaching Evaluation: Lab Final Exam	

\*\* A formal report is required for this experiment. The report is due on Oct. 11-17, depending on which day your lab is scheduled. Please refer to "Proper Formal Report Writing" and "Making Proper Graphs" on page 8-10 of your manual.

- **Labs will begin on the date indicated.** After Labor day, the lab week will begin on Tuesday and run through the following Monday. Students will perform the lab on their regular lab day as indicated on the calendar (see page 2).

### **Grading Scale:**

\* Course grades will be assigned based on your rank within the class. Historically, only the top 25% of each section has received an A.

**THREE ZEROS WILL RESULT IN AN AUTOMATIC GRADE OF "F" FOR THE SEMESTER**

### **Grading Policy:**

\* *All lab reports are due at the next laboratory session.*

\* *There will be a 20% per day penalty assessed for late lab reports (not counting Saturday and Sunday); therefore, a lab which is 5 days late will be worth 0 points. Example: A 10-point lab that is due on Thursday is turned in on Monday; it is 2 days late and would thus, be worth a maximum point value of 6 points.*

\* *Lab reports can be turned in to your TA during laboratory session or into your TA's mailbox. You should locate your TA's mailbox on the first day of class.*

### **Missed labs and Make up lab policies:**

\* You will be asked to leave the lab if you arrive late, without goggles, do not have the proper attire for lab, or do not have the pre- lab and none of these count as a valid excuse for a make-up lab.

\* *Missing a lab will lead to a grade of zero.*

\* Due to the space requirement and necessity of different chemicals for each lab, the stockroom cannot leave labs out after they are finished. Therefore, *each lab is only available to be performed during that lab week* (please refer to the calendar on page 2). A lab can only be made up if missed for a "valid reason", with a properly signed permission form. You may get the form from your own TA, or Lilia San Miguel at the Stockroom, Dr. Swamy in CP316, or from Dr. Graves in CP 302. **You will not be**

*allowed to make up a lab without the signed form. Take this permission form with you and get it signed and dated by the TA with whom you made up the lab.*

**ONLY 2 MAKE-UP LABS WILL BE ACCEPTED FOR THE ENTIRE SEMESTER.**

**\* The lab report for a makeup lab has to be turned in your regular TA with the rest of the lab class. The permission slip containing all the requisite signatures must be attached to that lab report.**

*Example, say your regular lab meets every Tuesday at 11:00 am. You do a makeup lab for this experiment at 4 pm on Monday. Your lab report is still due on Tuesday morning at 11:00 am with the rest of the class.*

**\* Turning your lab report into a wrong mailbox is the same as not turning it in at all and will be a zero.**

**\* Please also note that attending a lab, but not turning in a lab report is the same as missing the lab, and you will be assigned a grade of zero.**

**Fall 2011  
CHM 1045L Calendar**

Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
<b>Aug. 22</b> Check-in	23 Check-in	24 Check-in	25 Check-in	<b>26</b> Check-in	27	28
<b>Aug. 29</b> Exp. 1 <b>Reg. Closes</b>	30 Exp. 1	31 Exp. 1	<b>Sep. 1</b> Exp. 1	2 Exp. 1	3	4
Sept. 5 <b>Labor Day</b>	6 Exp. 2	7 Exp. 2	8 Exp. 2	9 Exp. 2	10	11
Sept. 12 Exp. 2	13 Exp. 3	14 Exp. 3	15 Exp. 3	16 Exp. 3	17	18
Sept. 19 Exp. 3	20 Exp. 4	21 Exp. 4	22 Exp. 4	23 Exp. 4	24	25
Sept. 26 Exp. 4	27 Exp. 5	28 Exp. 5	29 Exp. 5	30 Exp. 5	<b>Oct. 1</b>	2
Oct. 3 Exp. 5	4 Exp. 6	5 Exp. 6	6 Exp. 6	7 Exp. 6	8	9
Oct. 10 Exp. 6	11 Exp. 7 <i>Formal Report Due</i>	12 Exp. 7 <i>Formal Report Due</i>	13 Exp. 7 <i>Formal Report Due</i>	14 Exp. 7 <b>Last drop day</b> <i>Formal Report Due</i>	15	16
Oct. 17 Exp. 7 <i>Formal Report Due</i>	18 Exp. 8	19 Exp. 8	20 Exp. 8	21 Exp. 8	22	23
Oct. 24 Exp. 8	25 Exp. 9	26 Exp. 9	27 Exp. 9	28 Exp. 9	29	30
31 Exp. 9	<b>Nov. 1</b> Exp. 10	2 Exp. 10	3 Exp. 10	4 Exp. 10	5	6
Nov. 7 Exp. 10	8 No lab	9 No lab	10	11 <b>Veteran's Day</b>	12	13
Nov. 14 Exp. 11	15 Exp. 11	16 Exp. 11	17 Exp. 11	18 Exp. 11	19	20
Nov. 21 No lab	22 No lab	23 No lab	24 <b>Thanksgiving</b>	25 <b>Thanksgiving</b>	26	27
<b>Nov. 28</b> checkout & final	29 checkout & final	<b>30</b> checkout & final	<b>Dec. 1</b> checkout & final	2 checkout & final	3	4

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