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 pages 7 – 9 in you lab manual, and consult your TA for pre-lab assignment details.

- 1. General Chemistry I Laboratory Manual, 2012, Graves & Thompson
- 2. A bound laboratory notebook with original/duplicate numbered pages.
- 3. A calculator with logarithm function no graphing calculators allowed!
- 4. A black or blue ball-point pen
- 5. 1-2Gb USB flash drive
- 6. A pair of safety goggles and protective clothing including long sleeves, pants, socks and shoes that cover the ALL 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, Crocks, and "barefoot" style shoes are NOT ACCEPTABLE in the lab.

Exp#	<u>Dates</u>	Experiments				
	Jan. 6 – 11	Check-in, Safety rules, General Instructions, Computer ChemLab	3-33			
1	Jan. 13 – 18	Properties and Changes of Matter				
	January 20 Martin Luther King (MLK) Day: University Closed					
2	Jan. 21 – 27	Investigation of a Powder	39 – 41			
3	Jan. 28 – Feb. 3	An Introduction to the SPARK System	42 - 54			
4	Feb. $4 - 10$	Conductivity of Aqueous Solutions and Conductometric Titrations	55 - 60			
5	Feb. 11 – 17	Percent Oxygen in a Compound: Stoichiometry and Catalysis**	73 - 76			
6	Feb. 18 – 24	Introduction to Qualitative Analysis (Part 1)	77 - 81			
6	Feb. 25 – Mar. 3	Introduction to Qualitative Analysis (Part 2) Formal Report due	77 - 81			
7	Mar. 4 – 8 & 17	Calorimetry and Heat Capacity of a Metal	83 - 86			
8	Mar. 18 – 24	Exploring Gas Laws (session I)	61 - 72			
8	Mar. 25 – 31	Exploring Gas Laws (session II)	61 - 72			
TBA	Apr. 1 – 7	Lab Practicum (no pre-lab assignment)	N/A			
	Apr. 8 – 14	Check-out: Teaching Evaluation and Lab Final Exam	N/A			

^{**} A formal report is required for this experiment. The report is due on Feb 25 – Mar. 3, depending on which day your lab is scheduled. Please refer to "Proper Formal Report Writing" (pgs. 10 – 11) and "Making Proper Graphs" (pg. 15) of your manual.

General Information:

- Labs will begin on the date indicated. After Martin Luther King 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, approximately the top 30% of each section has received an A or A-.
 - THREE ZEROS WILL RESULT IN AN AUTOMATIC GRADE OF "F" FOR THE SEMESTER

• Grading Policy:

- o All lab reports are due at the next laboratory session.
- o 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).
- o 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. Turning in a lab report to the wrong mailbox is the same as not turning it in, and will result in a zero for that experiment.

• Missed labs and Make up lab policies:

- You will be asked to leave the lab if you arrive late, without proper attire for lab, or do not have the correct, completed prelab for the experiment. None of these count as a valid excuse for a make-up lab.
- o Missing a lab for an unexcused reason will lead to a grade of zero on that report.
- O 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).
- o A lab can only be made up if missed for a "valid reason" and only 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.

$\circ~\underline{ONLY~2~MAKE\text{-}UP~LABS}$ WILL BE ACCEPTED FOR THE ENTIRE SEMESTER.

- O The lab report for a make-up lab has to be turned in to your regular TA with the rest of the lab class. The permission slip containing all requisite signatures must be attached to that lab report, or else the lab will not be graded. (e.g., Your regular lab meets Wed at 11:45 am. You missed your Wed. lab and wanted to make it up. You obtain a make-up slip and complete a make-up lab for this experiment at 11:45 am on Mon. Your lab report, with the make-up slip attached, is still due on Wed. morning at 11:45 am with the rest of the class.)
- o Turning your lab report in to a wrong mailbox is the same as not turning it in at all and will be a zero.
- O Please also note that attending a lab, but not turning in a lab report, is the same as missing the lab, and will be assigned a grade of zero.

CHM 1045L Calendar: Spring 2014

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Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.			
Jan. 6	7	8	9	10	11	12			
Check-in	Check-in	Check-in	Check-in	Check-in	Check-in				
& Excel Lab	& Excel Lab	& Excel Lab	& Excel Lab	& Excel Lab	& Excel Lab				
13	14	15	16	17	18	19			
Exp. 1	Exp. 1	Exp. 1	Exp. 1	Exp. 1	Exp. 1				
	Reg. Closes								
20	21	22	23	24	25	26			
MLK Day	Exp. 2								
27	28	29	30	31	Feb. 1	2			
Exp. 2	Exp. 3								
3	4	5	6	7	8	9			
Exp. 3	Exp. 4								
10	11	12	13	14	15	16			
Exp. 4	Exp. 5								
17	18	19	20	21	22	23			
Exp. 5	Exp. 6a								
24	25	26	27	28	Mar. 1	2			
Exp. 6a	Exp. 6b								
	Formal Due								
3	4	5	6	7	8	9			
Exp. 6b	Exp. 7								
Formal Due									
10	11	12	13	14	15	16			
Spring Break	Spring Break	Spring Break	Spring Break	Spring Break	Spring Break				
17	18	19	20	21	22	23			
Exp. 7	Exp. 8a								
Last drop day	_	_	-	-	_				
24	25	26	27	28	29	30			
Exp. 8a	Exp. 8b								
31	April 1	2	3	4	5	6			
Exp. 8b	Lab Practicum								
7	8	9	10	11	12	13			
Lab Practicum	Checkout;	Checkout;	Checkout;	Checkout;	Checkout;				
	Final Exam								
Apr. 14	15	16	17	18	19	20			
Checkout;				Classes end					
Final Exam									

** Formal Report due Feb. 25 – March 3

Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas, and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Handbook.