

## General Chemistry II Laboratory CHM 1046L

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 II Laboratory Manual, 1998, Moore, *et al.*
  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 or the bookstore.*

Exp	Dates	Experiments	Pages
	Aug. 23 – 26	Check-in: Safety rules and General Instructions Read "Significant Figures, Precision and Accuracy"	3-7  11-13
1	Aug. 30 – Sep. 2	Determination of the Half-Life of a Radioisotope	28-35
2	Sep. 6- 9	Chemical equilibrium **	38 -42
3	Sep 13 - 16	Volumetric Analysis (Part I)	14 – 20
3	Sep. 20 – 23	Volumetric Analysis (Part II and III) <i>(Formal report due)</i>	
4	Sep. 27 - 30	Qualitative Analysis of Group I Cations	53 – 55
5	Oct. 4 - 7	pH Indicators and the Determination of Ka for an Acid	44-49
	Oct. 11 - 14	Continuation of above	
6	Oct. 18 – 21	Qualitative Analysis of Group IV Cations	56-58
7	Oct. 25 – 28	Calorimetry and Heats of Reactions	21 – 27
8	Nov. 1 - 4	Solubility Product and Thermodynamic Values	59-62
9	Nov. 8 – 11	<i>Nov. 11<sup>th</sup> is Veteran's day – no lab</i>	
	Nov. 15-18	TBA (handout) <i>no pre-lab due</i>	
	Nov. 29-Dec. 2	Check-out: Teaching Evaluation: <b>Lab Final Exam</b>	

\*\* A formal report is required for this experiment. The report is due on Sep. 20 – 23, 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.** 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 into 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 Semester Calendar  
CHM 1046L**

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

**\*\* Formal Report due September 20-23**

*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.*