



CHM2054L: HHMI X-Lab (Chemistry)  
 Fall 2011 (August 22 - December 7) Sections 7945, 7949, 7950, 7966  
 (2 Credit Hours)  
Periods 2-5 8:30AM - 12:35PM (sections 7945 & 7949 ) Room: BMS JG05 A & B  
Periods 7-10 1:55PM - 6:00PM (sections 7950 & 7966 ) Room: BMS JG05 A & B  
 { No Classes held: 9/5, 11/4, 11/11, 11/24, 11/25 (UF Holidays) }  
 See Course Calendar for details

**Instructor:** PJ Brucat

Office Location: CLB311E

Contact info:

Email: Use ITL0 Private Messaging Tool

Phone 392-4654 (use email first)

Office Hours: by Appointment

**Lab Coordinator:**

Office Location: Biomedical Sciences Building, JG50

Contact info:

Email:

Phone: 273-8282

**Teaching Assistant:** Jackie Esquiaqui

Email: Use ITL0 messaging system

Office Hours: By appt.

**Teaching Assistant:** Li-Li Pan

Email: Use ITL0 messaging system

Office Hours: By appt.

**Teaching Assistant:** Rainey Patterson

Email: Use ITL0 messaging system

Office Hours: By appt.

**Teaching Assistant:** Annaliese Thuijs

Email: Use ITL0 messaging system

Office Hours: By appt.

FALL SEMESTER 2011								
S	M	T	W	T	F	S		
Aug.	14	15	16	17	18	19	20	Registration
	21	22	23	24	25	26	27	Drop/Add
	28	29	30	31				
Sept.					1	2	3	
	4	5	6	7	8	9	10	Holiday
	11	12	13	14	15	16	17	
	18	19	20	21	22	23	24	
	25	26	27	28	29	30		
Oct.							1	
	2	3	4	5	6	7	8	
	9	10	11	12	13	14	15	
	16	17	18	19	20	21	22	
	23	24	25	26	27	28	29	
	30	31						
Nov.			1	2	3	4	5	Homecoming
	6	7	8	9	10	11	12	Holiday
	13	14	15	16	17	18	19	
	20	21	22	23	24	25	26	Holiday
	27	28	29	30				
Dec.					1	2	3	
	4	5	6	7	8	9	10	Reading Days
	11	12	13	14	15	16	17	Commencement
	18	19	20	21	22	23	24	Grades Due Dgs Cert.
	25	26	27	28	29	30	31	Holiday

**Course Description:** CHM2054L is a laboratory course in Chemistry, with an emphasis on the development of an appreciation of the interdisciplinary nature of Science, the Scientific Method, and Life Science related themes. This course satisfies all General Chemistry Laboratory requirements for all majors and courses.

**Goals:** The objectives of this course are three fold:

- Learn and refine ones understanding of concepts fundamental to Chemistry and the Life Sciences
- Learn and appreciate some of the Techniques and Methods used in modern Experimental Sciences
- Develop and communicate critical thinking skills in relation to Physical Science and Experimentation.

**Tentative List of Lab Experiments/Activities**

- Measurement & Data Analysis
- Conductivity and Chemical Composition
- Chemical Equilibrium: Aqueous Acid/Base Reactions
- The Scientific Literature
- Spectroscopy: The study of Matter with Light
- Spectrometry: Using Light for Measurement
- Chromatography
- Chemical Kinetics
- Thermochemistry
- Equilibrium Thermodynamics
- Electrochemistry
- Proteomics

**Course Operations:**

**Attendance:** Attendance during each and every lab session is required for the full duration of the session or until dismissed. You must be present in the lab at the beginning of the lab session --- late arrivals will not be permitted and will count as an absence. If you miss either of the first two lab sessions (this term, the 8/25 and 9/1 sessions), you will be dropped from the course. If you have an unexcused absence from the any lab session after the first two weeks, you will lose all the points available for that lab and be dropped one letter grade for the course. Two unexcused absences will immediately result in a failing grade for the course.

**Grading:** Each week we will have a lab activity consisting of a pre-lab quiz, a lab session, and post-lab reporting. All pre-lab activities, unless otherwise noted, must be completed by 8:30 am before lab. Students must keep up lab notebook during class to be checked by TAs during the lab session. Post-lab assignments are due the following Wednesday by noon. Each of these activities will be graded. There will be approximately 12 weeks of graded lab activities. Each week's activities will be worth approximately 40 points roughly according to the following model:

Pre-Lab/Quiz 10 pts  
 Lab Activities 20 pts  
 Post-Lab Report 10 pts

Each student's week totals will be summed to obtain a grade point total from which the course grade will be computed. The lowest week total will be dropped. The last weekly activity for the term will consist of an individual practical examination and will be valued at twice a normal week's points (80). Course grades will be computed from the percentage of available points accrued as follows:

A > 87%  
 A- > 80%  
 B+ > 77%  
 B > 73%  
 B- > 70%  
 C+ > 67%  
 C > 60%  
 D > 50%

All aspects of the course grade computation are subject to modification at any time by Brucat without negotiation or appeal.

**Course Website:** All course materials, announcements, exercises, assignments, and grades will be available through the website found at the following location:

« <http://itl0.chem.ufl.edu/moodle/course/view.php?id=28> »

Registration for this website is automatic with your course registration. Login authentication is through your 'gatorlink' username and password. All communication will be facilitated through above class website messaging system. All changes to course schedule or operating procedure will be announced and documented on this website. It is your responsibility to be familiar with the contents of the website and monitor it for changes. Substantive changes will be accompanied by an announcement. Configure your messaging preferences to forward announcements to your most active email account for best results.

**Groups:** Lab sessions will consist of two sessions, a Morning and an Afternoon. Each student attend only one session per week, as per their section number. Furthermore, most lab activities will be performed in groups of 2 students randomly assigned. In these activities, you will work with your lab partner and share equipment. We encourage collaboration between groups and, of course, lab partners are supposed to help each other as much as possible. The lab session grade will be made per group where appropriate; Pre-lab and post-lab activities, as well as the final practical exam, will be graded on an individual basis.

**Required materials:**

- **Safety Glasses** Any UF approved safety eyewear. Examples are available at the UF bookstore
- **Notebook** Marble Composition (either graph or lined) or equivalent. Non-removable numbered pages
- **Proper Attire** Long Pants, Closed-toed shoes, Loose fitting attire. Cover the skin and be sensible.
- **Textbook** Any General Chemistry textbook is useful. Many are available at the Library.

**Lab Computer use:** Much of our data acquisition and reporting will be performed through the use of laboratory computers which will be available for you to use under the UF [acceptable use policy](#). You need not bring your own laptop, data acquisition computers will be provided. You may also want to possess a portable USB storage device for your personal data, or you can simply email yourself files from the lab, or upload files to your cloud storage location.

**Software:** Microsoft Excel or Open Office Calc (free) will be used at times to graph and analyze data. Microsoft Word or Open Office Writer will be used at times for document processing. Similarly, Microsoft PowerPoint or Open Office Present will be used to author and render presentations and reports. You should obtain and familiarize yourself with the workings of presentation, spreadsheet, and text processing software. Other, more specialized software may also be used in the course of the lab. Documentation for such will be provided.

**Honor Code:** The UF Honor Code applies to all aspects of this course. It is required that you report any possible infractions to your instructor immediately.

**Students with disabilities:** Students requesting classroom accommodation for disabilities must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

[We, the members of the University of Florida Community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity](#)

All aspects of CHM2054L operation and grading are subject to modification at any time by Brucat.