

CHM2046L Gen Chem II Lab

Summer 2017

Instructor Information

Instructor

Dr. Simon E. Lopez

Email

Email in Canvas only
(simonlopez@chem.ufl.edu)

Office Location & Hours

Office is SISLER 329.
Office hours: M,W,R (2-4 pm)

Lab Managers

Donna Turner
Candace Biggerstaff

Contact

In lab JHH-110
(Joseph Hernandez Hall)

Office Location

Lab stockroom

Teaching Assistant

To be assigned during first laboratory meeting; a full list of sections and corresponding TAs will be posted in Canvas when available.

General Information

Corequisites

CHM2046L is to be taken with CHM2046 or CHM2051 (Honors). Detailed prerequisite information and credit suitability can be found in the Undergraduate Catalog.

Meeting Times

CHM2046L meets once per week in JHH 110.

Description/Goals

As both a general education requirement and major's course, CHM2046L is designed to introduce you to common laboratory techniques and equipment used in the general chemistry laboratory, to help you gain understanding and proficiency in their use, and help you explore the process of doing experimental chemistry, and to illustrate representative examples of the useful and important concepts you are learning in the CHM2046 lecture. The course serves to teach the scientific method, skills for problem solving, general chemistry knowledge, and a connection to the principles that govern the natural world.

First Day of Lab

Lab will commence the week of May 15th, 2017. On the first day of lab, you will meet your TA and be assigned to your laboratory workstation. You will commence immediately with the first laboratory exercise (*Beer-Lambert Law*). Prior to attending the first (and each subsequent) lab period, you must familiarize yourself with the lab background and procedure and complete the Pre-Lab quiz. You should also make relevant notes and tables in your lab notebook and print a copy of the procedure if needed - paper/print copies of the manual are not provided.

Course Materials and Safety

Required Materials

- Approved safety glasses/goggles and proper attire.
- You will require a suitable laboratory notebook. Our recommendation is a standard composition notebook.
- A USB thumb drive. You will be generating data during lab. To take it home with you for manipulation and analysis a thumb drive will be necessary.

Goggles and Attire

You must be wearing department approved safety glasses or goggles and be properly attired to be admitted to the laboratory at all times, including on the first day of lab. Check the Canvas course pages for information on attire and the types of eye protection approved for use in this lab. Anyone without the necessary safety glasses, or who is inappropriately attired, will not be allowed into the lab. If you are asked to leave the lab due to improper attire, you will not be permitted a makeup. You can, however, leave and return during the lab period with required attire and complete as much of the lab as possible within the allotted time.

Safety

You are responsible for reviewing the safety information provided in Canvas. All of the activities worth credit for the course will be locked in Canvas until you satisfactorily complete the Safety Contract.

Logistics/Cleanliness

You will work within a small group to complete the laboratory activities. You should check your group's glassware for cleanliness before beginning the lab. Your group must wash the glassware/equipment and your workstation before leaving. You may not sign the attendance sheet until your TA has checked your station. If any glassware is broken during the lab session, communicate this immediately to your TA.

Lab Schedule

CHM 2046L General Chemistry Lab 2 Summer C 2017 Course Schedule

Lab Coordinator: Dr. Simon E. Lopez, 329 Sisler Hall (Office).

E-mail: simonlopez@chem.ufl.edu

E-Learning (Canvas): <https://lss.at.ufl.edu/> (will be updated regularly)

Text: CHM 2046L General Chemistry Laboratory (See Canvas)

Lab location: JHH-110, Joseph Hernandez Hall.

Office Hours: M (2 – 4 p.m.), W (2 – 4 p.m.), and R (2 – 4 p.m.) *in 329 Sisler Hall.*

Week of:	Lab Number	Content	Important Notes
May 15 th	1	Check-in + Beer's Law	-
May 22 nd	2	Kinetics	-
May 29 th	3	Equilibrium	May 29 th is Memorial day. <i>Monday</i> students will do make-up for Lab # 3 on July 31 st during the make-ups week.
June 5 th	4	Acid/Base I	-
June 12 th	5	Acid/Base II	-
June 19 th	No Labs	No Labs	Summer break week
June 26 th	6	Le-Chatelier	-

July 3 rd	No Labs	No Labs	July 4 th (T) is the Independence day
July 10 th	7	Thermodynamics	-
July 17 th	8	Galvanic Cells	-
July 24 th	9	Electrolytic Cells	-
<i>Makeup: Week of July 31st (M-R)</i>			

Attendance Information

Lab Period

You are expected to attend lab during your scheduled lab period, and to leave the laboratory when the lab period ends. Everyone is given the same amount of time to complete the experiments. If you are well-prepared, you should not experience difficulties completing the experiments within the allotted timeframe. You may not arrive early, stay late, or attend during a different lab period to complete your laboratory activities. If you are late in leaving your lab period, your TA will deduct 1 full point from your lab notebook grade for that experiment.

Lab Attendance

Attendance in the General Chemistry lab is critical for this course. Each laboratory period, you will learn techniques and concepts that will continue to be important throughout the semester. It is essential that you be present and prepared for lab each time that it convenes.

Your TA will take careful attendance each lab period while circulating during the lab period and grading notebooks. You must sign your name on the attendance sheet during each lab period - *this is your responsibility*, not the TA's. If you aren't sure whether or not you've signed the attendance sheet, check with your TA and do so before leaving.

If you are not in attendance you will receive a score of 0 for your Lab Notebook for that period, as well as for all assignments pertaining to the lab exercise, with the exception of the Pre-Lab Quiz, for which attendance is not required. If you do not attend lab but complete the other assignments for the lab exercise, your TA will replace any erroneous grades with a grade of 0 after reviewing the attendance records. **The signed attendance sheet is the official attendance record - make sure you sign each lab period!**

Absence

Students who must miss lab due to extreme circumstances beyond their control may submit a request for **make-up** within 7 days (this means if you miss a Tuesday lab, you must submit your request at maximum the following Monday to Dr. Lopez office (during his office hours personally) of the missed lab period. Please understand that personal issues with scheduling conflicts such as volunteering, work, non-emergency dentist or doctor appointments, extracurricular activities, or travel, do not justify an excused absence. To have a request considered for approval, you must (1) provide a completed request form, available in the Canvas site - bring personally the filled form to your coordinator (Dr. S.E. Lopez) during his office hours; and (2) request an excuse note from the Dean of Students Office. We have the Dean of Students Office verify excused absences for us. They do so in a confidential manner, and simply inform instructors that an excused absence due to health reasons or family emergency has occurred. See the Dean of Students Office website for details. After 1 week, the absence will be considered unexcused.

Emailed requests to "preview" excused absences will be ignored; it should be very clear what constitutes an excused absence. If you know in advance that you will need to miss a lab session, please submit your request as early as you can, even in advance. Requirements for class attendance and make-ups in this course are consistent with university policies that can be found in the [Undergraduate Catalog](#).

Any student who missed **more than three** lab sessions (excluding religious observances), whether excused or unexcused, will receive a grade of E in the course. The first excused absence for a student will be rescheduled during make-up week at the end of term during your regular lab period.

If you decide to drop the course before the end of the term, please arrange to check out of your lab workstation **BEFORE** you drop the class. Check with the stockroom manager for a good time to check out.

Grading

Grade Breakdown

Each laboratory exercise is comprised of a Pre-Lab quiz, a notebook grade, a Post-Lab exercise, and various other assignments specific to that lab. Each lab exercise as a whole is weighted equally to your final grade. Within each lab exercise, assignments are weighted according to the published point value. If there is any confusion about this, please see me. Detailed information regarding each of these grading items is provided in Canvas.

Assignments weights are as follows:

Assignment Group	Weight %
Safety	2.5%
Surveys	2.5%
To do before Lab 1	5.0%
9 Labs @ 10.0% each	90.0%

Grade scale (note: there is no rounding to your score in Canvas):

Letter	A	A-	B+	B	B-	C+	C	D+	D	D-	E
Cutoff	90.0	87.0	84.0	77.0	73.0	70.0	62.0	59.0	56.0	50.0	< 50.0

Re-grades: Lab Notebook

The lab notebook is graded during lab period. Communicate any lab notebook grade disputes to your TA during the lab period and your TA will address your concerns at that time and make any necessary corrections during the lab period. If your TA finds it necessary to re-grade your lab notebook, he/she will correct the grade on your notebook and on his/her grade sheet immediately.

Re-grades: Pre- and Post-Lab Quizzes

Please contact Dr. S. Lopez through Canvas with the question of interest. Be specific - quiz title, question title or number, and quiz attempt, to facilitate the process.

Late penalties: Lab Notebook

Late penalties for Lab-Notebook submission-uploading: You must upload your lab Notebook in Canvas using the uploading system + indications provided, not later than 11:59 pm of the immediate next week-day of your lab session (this means the due date).

After the due date, penalties will be the following:

24 h later the due date (or any period of time in between): only 50% of the grade will be given.

After 24h later the due date: 0 %. (no credit will be given).

University Policies

University Policy on Accommodating Students with Disabilities

Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

University Policy on Academic Misconduct

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida. The following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php>.”

U Matter, We Care

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing Staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Evaluations

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

Conflicts

If you experience issues with CHM2046L that you cannot resolve with your TA, please see Dr. Lopez in person. Don't wait until the end of term to resolve an ongoing issue.

General Education

This course satisfies the General Education requirement in the Physical Sciences.

Physical Science General Education Program Objectives

Physical science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the physical sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern physical systems. Students will formulate empirically-testable hypotheses derived from the study of physical processes, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.

These objectives are accomplished through participation in the lab sections, and individual work done on homework assignments and assessments.

General Education Student Learning Outcomes

Area	Institutional Definition	Institutional SLO
CONTENT	Content is knowledge of the concepts, principles, terminology and methodologies used within the discipline.	Students demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.
COMMUNICATION	Communication is the development and expression of ideas in written and oral forms.	Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.
CRITICAL THINKING	Critical thinking is characterized by the comprehensive analysis of issues, ideas, and evidence before accepting or formulating an opinion or conclusion.	Students analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems.

Naturally, all three areas of learning outcomes will be assessed in all categories of graded assignment administered in CHM2046L.

Specific Goals of CHM2046L

You will be required to analyze scientific concepts and think critically. This means being able to answer both quantitative (mathematical) and conceptual (quantitative) problems in a limited period of time. Additionally, you will have to write and/or orally communicate during your scheduled lab periods. You will be required to utilize the methods of science as a logical means of problem solving through critical thinking. This means you must analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems. To ensure your competency in these concepts you will be required to complete quizzes and assignments that require critical thinking, analysis of problems, and drawing conclusions. Of particular importance in the lab course will be your ability to collect data, organize the data logically, generate a meaningful graphical representation of the collected data, and draw conclusions from the total exercise.

Disclaimer

This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.