

# CHM2046L GEN CHEM II LAB, FALL 2019

## INSTRUCTOR INFORMATION

Course Coordinator	Email	Office Hours (Flint 251/258)
Dr. Korolev	Email via Canvas only	Monday through Friday 2:15pm-3:30pm

## LAB MANAGERS

The lab managers are Candace Biggerstaff and Donna Turner. Their office is in the lab stockroom in JHH 110.

## TEACHING ASSISTANT

To be assigned during first laboratory meeting; a full list of sections and corresponding TAs will be posted on the Syllabus page in Canvas when available. TAs hold weekly office hours in JHH 105. Office hours are posted on the Syllabus page in Canvas when available.

## GENERAL INFORMATION

### COREQUISITES

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

### MEETING TIMES

CHM2046L meets once per week in JHH 110. The meeting time can be found on your schedule in ONE.UF.

### 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 start meeting the week of September 3<sup>rd</sup>, but you have assignments due online before this date. The first deadline for online assignments is Friday, August 30<sup>th</sup> at 8:00am - check Canvas for details.

On the first day of lab, you will meet your TA and be assigned to your laboratory workstation. You will undergo safety training/orientation during the first lab period and complete a short lab activity. You will not be allowed to enter lab unless you are dressed in proper lab attire (including approved eye protection) and have completed the online safety contract. Prior to attending each lab period, you must familiarize yourself with the lab background and procedure and complete the Pre-Lab quiz. You should also summarize the procedure and make relevant data tables in your lab notebook - part of your notebook grade will be based on this. Each workstation in the lab is equipped with a monitor that allows access to eLearning to view the lab documentation, and to UF Apps.

## COURSE MATERIALS AND SAFETY

### REQUIRED MATERIALS

- Approved safety glasses/goggles and proper attire. You will be asked to leave the lab if not properly attired. There are no make ups for attire issues.
- You will require a suitable laboratory notebook. Our recommendation is a standard composition notebook.

### 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 as long as you return within 15 minutes of the start of the period.

### 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 in pairs 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 so it can be replaced/cleaned up.

### LAB SCHEDULE (SUBJECT TO CHANGE)

DATES	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
Aug 20 - 23	NO LABS			
Aug 26 - 30	NO LABS			
Sept 2 - 6	HOLIDAY - NO LABS	Beer's Law Lab		
Sept 9 - 13	Beer's Law Lab	Kinetics Lab		
Sept 16 - 20	Equilibrium Constant Lab			
Sept 23 - 27	Le Chatelier Lab			
Sep 30 - Oct 4	Kinetics Lab	NO LABS		HOLIDAY - NO LABS
Oct 7 - 11	Acids & Bases Lab			
Oct 14 - 18	Salts & Buffers Lab			
Oct 21 - 25	Thermodynamics Lab			
Oct 28 - Nov 1	Galvanic Cells Lab			
Nov 4 - 8	Electrolytic Cells Lab			
Nov 11 - 15	HOLIDAY - NO LAB	Transition Metals Lab		
Nov 18 - 22	Transition Metals	Lab Practical		
Nov 25 - 29	Lab Practical	HOLIDAY - NO LABS		
Dec 2 - 4	Lab Practical Makeup			NO LABS

## 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. You will not be allowed to enter lab if you are more than 15 minutes late. If you are more than 15 minutes late due to an extreme circumstance beyond your control, you may submit a request for an excused absence (see the absences policy below).

### 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 and in your future lab career. 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 are responsible for making sure that your attendance has been recorded. 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 and on other lab related assignments for that period. *The attendance sheet is the official attendance record!*

### ABSENCES

Students who must miss a normal lab due to extreme circumstances beyond their control may submit a request for excused absence within 7 days of the missed lab period. For students whose lab absences are approved, all post-lab assignments will be excused and their grade will be determined based on the remaining assignments. As a result, every other grade in the course counts for more of the student's final grade.

Make ups for absences for the lab practical must be requested within 1 day of the missed lab practical to ensure time for scheduling. Students will be scheduled to take the makeup lab practical in the last week of the semester. It is the student's responsibility to make time to make room in your schedule for make-up labs during the regular lab sessions.

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 (found on Canvas) via email to your coordinator (Dr. Korolev) through Canvas; and (2) request an excuse note from the Dean of Students Office if missing lab due to illness or emergency. After one week, the absence will be considered unexcused and you will receive a score of 0.

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 in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>. Any student who misses more than two lab sessions (excluding religious observances, disability related absences, or military leave), whether excused or unexcused, will receive a grade of E in the course.

## GRADING

### ASSIGNMENTS AND LATE POLICY

Pre-lab quizzes are due at 8:00 am the day of a student's scheduled lab period. There are also some initial quizzes due on August 30<sup>th</sup> at 8:00 am. Quizzes cannot be completed late for any credit. For best performance, use only Firefox or Chrome for quizzes. Make sure you start well in advance of the due date/time, in case your computer's clock differs from official Canvas time. All due dates/times are in EST.

All other lab-related assignments are due by 8:00 am the day following the student's lab section and, when possible, can be considered for 50% credit if submitted late within 24 hours of the deadline. The penalty is applied even if the submission is received by Canvas one second past the 8:00am deadline, so be mindful of time. Emailed assignments are not considered for grading.

We highly recommend you submit assignments early and verify they've been submitted through Canvas. If you have personal computer issues there are computers on campus available for student use.

### 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 the instructor. Detailed information regarding each of these grading items is provided in Canvas. Assignment weights are as follows:

Assignment Group	Weight %
Safety/Surveys/Syllabus	5%
Pre-lab Quizzes	15%
Lab Assignments	65%
Lab Practical	15%

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	≥93.0	≥90.0	≥86.0	≥83.0	≥80.0	≥76.0	≥70.0	≥66.0	≥63.0	≥60.0	<60.0

### RE-GRADES

All lab assignment grades are graded by your TA so you should communicate any lab notebook grade disputes to your TA. Your TA will address your concerns at that time and make any necessary corrections. 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. The notebook must be scanned and submitted to Canvas to the relevant assignment in order for points to be considered toward your course grade.

Regrades of assignments submitted through Canvas, typically via file upload, must be requested within 7 days of a grade being assigned, and should be directed to your TA. If there was a technical issue with the file that was submitted on Canvas, the file can be resubmitted via the comments section to be regraded, but the assignment will suffer a 50% penalty. Technical issues are the student's responsibility so it is recommended that you check your submission when you upload it on Canvas.

## 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: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>."

### 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](mailto: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 professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluer.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

### CONFLICTS

If you experience issues with CHM2046L that you cannot resolve with your TA, please see Dr. Korolev 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
<b>CONTENT</b>	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.
<b>COMMUNICATION</b>	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.
<b>CRITICAL THINKING</b>	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 assignments.

## 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 (qualitative) 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. If those need to change as the semester progresses, which is not unlikely, then the changes will be communicated to the class clearly.