

# CHM2045L GEN CHEM I LAB

SPRING 2021

## INSTRUCTOR INFORMATION

Instructor	Email	Phone
Mrs. Veige	Email in Canvas <u>only</u> 352-392-0518 CCB 103	Email only; calls or messages may not be returned as classes are online

## GRADUATE TEACHING ASSISTANT

Your teaching assistant will be assigned during the first week of term. You will be added to a group in Canvas after TAs have been assigned; the group name contains the name of your TA. You will meet your teaching assistant during the first lab meeting online via Zoom. Your teaching assistant will send an announcement with their contact information and Zoom join instructions prior to the first lab meeting. Links to join your TA Zoom meetings will be listed prominently on the course home page in Canvas by the day before your first scheduled lab session at the latest (the week of Jan. 25).

You must check Canvas Announcements and the course home page regularly.

## UNDERGRADUATE TEACHING ASSISTANTS

We are fortunate to have a number of undergraduate TAs working with us this semester. Each week's lab has a corresponding Discussion board in Canvas upon which students can ask questions pertaining to that week's lab, pre- and post-lab. Undergraduate TAs monitor the discussion boards and can provide guidance. Note the undergrad TAs will not provide solutions for questions, but will rather give guidance and hints as to how to proceed, and can answer some general questions. Undergraduate TAs do not grade any course assignments.

## AUDIO/VIDEO PRESENCE POLICY

Zoom sessions: The participation portion of your grade for this class will be calculated on the basis of your attendance and your participation in class activities during scheduled class times via Zoom. Since the pedagogical approach of this course depends heavily on student engagement and interaction, you are required, at a minimum, to participate in class activities through the audio function of Zoom. Your video presence is invited as well.

Zoom sessions are not recorded. The chat will not be recorded or shared.

As in all courses, unauthorized recording and unauthorized sharing of recorded materials are prohibited.

Full audio/video presence is required for proctored tests administered by Honorlock.

## GENERAL INFORMATION

## COREQUISITES

CHM2045L is to be taken with CHM2045. Detailed prerequisite information and credit suitability can be found in the Undergraduate Catalog.

## COURSE DELIVERY AND MEETING TIMES

This course is delivered online/synchronously at your scheduled lab meeting time. All meet times are in EST. Course content is delivered through the Canvas course shell and required lab meetings occur via Zoom during your scheduled lab period, starting at the beginning of the first of three consecutive class periods for which you are scheduled. The meeting time can be found on your schedule on ONE.UF. The Zoom link is provided in Canvas.

*All meeting times and due date times are in EST.*

## DESCRIPTION/GOALS

As both a general education requirement and major's course, CHM2045L 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 CHM2045 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 meeting the week of January 25<sup>th</sup> but you have assignments due online before this date. The first deadline for online assignments is Friday, January 22<sup>nd</sup> at 11:59 pm EST - check Canvas for details.

During your first online lab meeting the week of 1/25, you will meet your TA and a group of fellow classmates, and will complete the first lab activity during the 3-h lab period. Prior to attending each lab period, you must familiarize yourself with the lab background and procedure, and complete the pre-lab quiz and turn in your pre-lab notebook online. These are due at 8 am EST on your scheduled lab day. During the lab meeting, you will be assigned to small groups to answer questions and perform the calculations required. You will be graded on attendance and participation during each lab period. After the lab period, you will submit your post-lab assignments online in Canvas for grading. These are due at 11:59 pm EST the day following your scheduled lab. Students are encouraged to stay in their scheduled lab meeting for as much of the 3 h time as needed to complete the assignments so they are ready to turn in that evening.

## COURSE MATERIALS AND SAFETY

### REQUIRED MATERIALS

You require a computer with internet connection, webcam, microphone, Excel, and a portable mirror or reflective surface for Honorlock proctoring. See the minimum technical requirements at [honorlock.com/support](https://honorlock.com/support). Ensure your computer system meets their minimum system requirements.

You also require a suitable laboratory notebook such as a standard composition notebook.

## COURSE TECHNOLOGY

All UF students are expected to have reliable access to a computer, especially for an online course. Honorlock has specific hardware/software requirements: [honorlock.com/support](https://honorlock.com/support).

## 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.

In addition, there is a series of safety-focused assignments within most of the lab activities. Together, the safety assignments are worth a dedicated portion of your course grade and will appear on the final exam.

## LAB SCHEDULE (SUBJECT TO CHANGE)

DATES	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
Jan. 11-14	NO LABS			
Jan. 18-21	MLK DAY HOLIDAY	NO LABS		
Jan. 25-28	Density Lab			
Feb. 1-4	Hydrates Lab			
Feb. 8-11	Stoichiometry Lab			
Feb. 15-18	Gases Lab			
Feb. 22-25	Calorimetry Lab			
Mar. 1-4	FLEX DAYS – RESCHEDULED LABS FROM WEEKS 1-5 IF NEEDED (INCLEMENT WEATHER, ETC.)			
Mar. 8-11	Dilution & Beer's Law Lab			
Mar. 15-18	Kinetics Lab			
Mar. 22-25	Electrolytes Lab			
Mar. 29-Apr. 1	Lewis Structures Lab			
Apr. 5-8	Colligative Properties			
Apr. 12-14	FLEX DAYS – RESCHEDULED LABS FROM WEEKS 6-10 IF NEEDED (INCLEMENT WEATHER, ETC.)			
Apr. 19-22	NO LABS			READING DAY

Lab Final Exam: Apr. 28<sup>th</sup>, 10 am – 12 pm

Flex Days will be used if earlier regularly scheduled lab days need to be rescheduled for any reason due to university closure, etc. Such situations will be clearly announced via Canvas Announcements. You should keep your schedule clear during these times in case needed, and monitor the course Announcements regularly.

## ATTENDANCE INFORMATION

### LAB PERIOD

You are required to attend lab online via Zoom during your scheduled lab period. If you are well-prepared, you should not experience difficulties completing the experiments within the allotted timeframe. Your attendance and participation will be recorded during lab.

- If you are more than 5 minutes late, you forfeit your attendance points for the day.
- If you arrive more than 15 minutes late you also forfeit your participation points for the day. You are still responsible for completing the lab and turning in the lab assignments even if not present.
- To account for technical issues joining a meeting at the start of session, one day of attendance/participation points will be dropped for all students. All further absences are marked as 0. Communicate any technical issues you experience joining a meeting promptly to your TA via Canvas email.

- If you arrive after the first 15 min you will be placed in a Zoom breakout room by yourself and will not have other students to work with; arriving late is disruptive to students who have been working on the assignments. The TA divides his/her time between the various breakout rooms, so you will not have the undivided attention of the TA if working alone as a result of late arrival.
- Microphones must be turned on during Zoom sessions. This is a collaborative course where you work with your TA and with other students in the course. TAs monitor participation based on interaction via audio during lab meeting times.

## ABSENCES

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/>. Students who must miss lab due to extreme circumstances beyond their control may submit a request for a deadline extension within 3 days of the missed deadline.

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 a deadline extension.

To have a request considered for approval, you must (1) complete the Extension Request Form in Canvas - this is formatted as a Canvas quiz, and has a section in which you can a) detail which assignments were missed and why and b) upload a doctor's note or other supporting documents; and (2) request an excuse note from the Dean of Students Office if required. Please note that a doctor's note or supporting documentation is required for all requests.

Please note that missing a lab and requesting a deadline extension is applicable to most, but not all, assignments.

- Approved extensions for a lab will result in a grade of "EX" being entered for that lab's attendance/participation score.
- Where applicable, due dates will be extended by up to 7 d.
- Students are not permitted to attend a lab period other than their regular scheduled lab period; late/make-up assignments are completed by the student on their own.

## GRADING

### DEADLINES AND LATE POLICY

The first graded assignments for the course are due in Canvas on Jan. 22<sup>nd</sup> at 11:59 pm EST. Among those assignments is a Safety Contract. All remaining course material/assignments are locked in Canvas until the safety contract is completed. If you miss any assignments due to not completing the contract on time, you forfeit the related grade(s).

Each week you have both pre- and post-lab assignments. Pre-lab assignments are due at 8 am EST the day of a student's scheduled lab period. All other lab-related assignments, including any safety assignments due that week, are due by 11:59 pm the day following your scheduled lab day. These assignments (pre- and post-) commence the week of Jan. 25<sup>th</sup>.

Pre-lab 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. There are no extensions due to travel, time zone, or computer issues; all quizzes are open for completion well in advance of the due date. All due date/times are in EST.

Pre-lab notebooks and post-lab assignments submitted late are penalized -25% per day late. The penalty is applied even if the submission is received by Canvas one second past the deadline, so be mindful of time (i.e. 1 s overdue is 1 day late, -25%). Emailed assignments are not considered for grading. We highly recommend you submit assignments early and verify they've been submitted through Canvas. We recommend using computers to turn in work rather than apps on a student's phone. Verify all submissions. All due dates/times are in EST.

## EXAM

A final lab exam will be administered during the registrar-scheduled final exam time for this course, 10 am - 12 pm Apr. 28<sup>th</sup>.

Exam absences will be handled in accordance with official UF academic regulations. For more information, see <https://catalog.ufl.edu/UGRD/academic-regulations/> . See below for further clarification for two different types of situations.

(1) Conflicts with other events: this should be rare, as the final exam is during the registrar scheduled lab period. Such reasons may include religious holidays, military obligations, special curricular requirements (e.g., attending professional conferences), or participation in official UF-sanctioned activities such as athletic competitions, etc. For more information on such absences see the official UF Policy at <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#absencestext> ). If you must be absent for an exam due to a documented and approved conflict known in advance, you must e-mail your instructor (within Canvas) the documentation at least one week prior to the scheduled exam and an early conflict exam will be scheduled for you.

(2) Missing an exam due to an emergency or sudden illness: If you are absent for an exam due to an unpredicted documented medical reason or family emergency, you must contact the instructor as soon as possible, and you may be asked to have your excuse verified by the Dean of Students Office (DSO). Your instructor will follow UF academic regulations in evaluating the notification and/or documentation received from you or from the DSO on your behalf. Once your instructor is satisfied with the validity of your exam absence a make-up exam will be scheduled after a reasonable amount of time, i.e., before the end of the semester. If your documentation is deemed insufficient to excuse your absence you will receive a zero on the missed exam.

## HONORLOCK

Honorlock will proctor your exams this semester. You do not need to create an Honorlock account, download software, or schedule an appointment for your exam. Honorlock is available 24/7 and requires a computer, webcam, microphone, and a stable internet connection.

To get started, you will need Google Chrome and to download the Honorlock Chrome Extension. You can download the extension at [www.honorlock.com/extension/install](http://www.honorlock.com/extension/install).

When you are ready to test, log into Canvas, go to your course, and select your exam. Click "Launch Proctoring" to begin the Honorlock authentication process, during which you will take a picture of yourself,

show your ID, and complete a scan of your room. You will need a small handheld mirror/reflective surface to show the camera underneath your table/desk, etc. Honorlock will record your exam session and record your screen.

If you encounter technical difficulties with Honorlock, contact Honorlock directly. You may live chat, phone (855-828-4004) and/or email [support@honorlock.com](mailto:support@honorlock.com). You should spend some time reading about their service and testing your system on their website. For other technical issues contact the Help Desk.

Extensive Honorlock documentation, including a student privacy guide, is available at <https://dce.ufl.edu/services/online-proctoring/>.

## EDUCATIONAL RESEARCH STUDY

This semester, CHM2045L is part of a chemical education research study within the Department of Chemistry and the College of Education at UF, investigating persistence in STEM fields among students enrolled in our undergraduate lab courses. The study includes three surveys, the first of which includes an Informed Consent question.

To participate in the study, students will agree to the Informed Consent Form as part of the first research survey by the survey due date. Participation in the study does not influence your course grade in any way. If you do not wish to participate in the study and have your survey data removed from the collected data, you still must complete the three surveys. We do ask you to participate in the study since the data collected may prove valuable and help us improve the educational experience for future gators. Please note that you will have to complete all three surveys prior to their due dates to earn a portion of your course grade; these surveys are included in the Survey category in your gradebook.

Each survey has a set due date, and cannot be completed late for credit.

## 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.

Assignment weights are as follows:

Assignment Group	Weight %
Safety Assignments/Surveys/Syllabus Quiz	5%
Attendance/Participation	5%
Lab Assignments (10 @ 7.5% each)	75%
Lab Exam	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 disputes directly to your TA via Canvas email. Your TA will address your concerns. Note that your assignments must be scanned and submitted to Canvas as a .pdf to the correct assignment in order for points to be considered towards your overall 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 submission of the file, the file can be resubmitted to the comments section for a regrade but the assignment will suffer a -50% penalty. Technical issues are completely avoidable, as students can submit an assignment, verify it has been submitted correctly, and verify the contents of the file submission prior to the deadline. Do not use the mobile app to submit assignments.

## 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.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

## NETIQUETTE

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions, and chats. Review the detailed information regarding Netiquette in Canvas. Make sure you complete the Netiquette Quiz, which counts towards your survey/syllabus/safety grade.

## CONFLICTS

If you experience issues with CHM2046L that you cannot resolve with your TA, please contact Mrs. Veige via email in Canvas. 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.

A minimum grade of C is required for general education credit.

## 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 assignment administered in CHM2045L.

### SPECIFIC GOALS OF CHM2045L

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. There is also a focus on an introduction to chemical safety.

### 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.