CHM2045L GEN CHEM I LAB, SUMMER 2021

INSTRUCTOR INFORMATION

COURSE COORDINATOR

The course coordinator for this course is Dr. Korolev. You can contact Dr. Korolev via Canvas email. Virtual office hours are also available by appointment.

LAB MANAGERS

The lab managers are Candace Biggerstaff and Jessica Webb. They can be contacted via Canvas email.

TEACHING ASSISTANTS

Your teaching assistant will be assigned during the first week of the semester. 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.

GENERAL INFORMATION

COURSE DELIVERY

This course will be delivered online/synchronously. Course content will be delivered through the Canvas course shell and required lab meetings will occur via the Zoom platform during your scheduled lab period.

MEETING TIME/LOCATION

CHM2045L meets synchronously online via Zoom once per week during your scheduled lab period. The meeting time can be found on your schedule on ONE.UF. The Zoom link will be provided on Canvas.

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 start meeting synchronously online via Zoom the week of May 17th, but you have assignments due before this date. The first deadline for online assignments for all students is May 14th at 11:59pm – check Canvas for details. During your first online lab meeting, you will meet your TA and fellow classmates, and complete the first lab activity. Prior to attending each lab period, you must familiarize yourself with the lab background and procedure, and complete the pre-lab quiz and submit your pre-lab notebook online. These will be due at 8:00am on your scheduled lab day. During the lab meeting, you will be assigned to work in groups to answer questions and perform the calculations to finish the lab. You will be graded on attendance and participation during each lab period. After the lab period, you will submit your post-lab assignments online to be graded. These will be due at 11:59pm on the day of your scheduled lab.

COURSE REQUIREMENTS

REQUISITES

Detailed prerequisite information and credit suitability can be found in the Undergraduate Catalog.

REQUIRED MATERIALS

You will require a computer with an internet connection, a functional webcam and microphone, and Excel. You can download Excel for free at: https://it.ufl.edu/services/gatorcloud-microsoft-office-online . Your computer must also meet the minimum system requirements for Honorlock proctoring (requirements listed at https://honorlock.com/support/). You will also require a suitable laboratory notebook such as a standard composition notebook.

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.

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.

LAB SCHEDULE (SUBJECT TO CHANGE)

Students will begin meeting on Zoom the week of May 17th, but there are online assignments due the week prior. This lab schedule is subject to change - students should keep their schedule free so that they are available during their scheduled lab meeting time every week. Flex days may be used if regularly scheduled lab days need to be rescheduled. Changes will be communicated via Canvas announcements; it is students' responsibility to read the Canvas announcements and follow the provided information.

DATES	TUESDAY	WEDNESDAY	THURSDAY
May 10 - 14	No lab - First Assignments Due: May 14th		
May 17 - 21	Density Lab		
May 24 - 28	Hydrates Lab		
June 1 - 5	Stoichiometry Lab		
June 7 - 11	Gases Lab		
June 14 - 18	Calorimetry Lab		
June 21 - 25	Summer Break		
June 28 – July 2	Dilutions Lab		
July 5 - 9	Kinetics Lab		
July 12 - 16	Electrolytes Lab		
July 19 - 23	Lewis Structures Lab		
July 26 – 30	Colligative Properties Lab		
August 2 - 6	Flex Days Lab Exam: Monday August 2nd at 8:00pm		

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 15 minutes late, will not be allowed to join the Zoom session and you forfeit your attendance/participation points for the day. Any student who has an unexcused absence will not be allowed to submit any post-lab assignments for the missed lab.

ABSENCES

Excused absences are for extenuating circumstances only: documented illness, family emergencies, or university approved absences. Travel, non-emergency doctor or dentist appointments, or extracurricular activities do not justify an excused absence. Emailed requests to "preview" excused absences will be ignored; it should be clear what constitutes an excused absence.

Students who miss lab due to extreme circumstances beyond their control may submit a request for an excused absence within 7 days of the missed deadline. To have a request considered for approval, you must (1) complete the Absence Request Form (found on Canvas); and (2) provide documentation by either attaching a doctor's note to the form (if due to illness) or request an excuse note from the Dean of Students Office (if due to a family emergency). 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 misses more than 2 lab sessions (excluding religious observances, disability related absences, military leave, or extreme circumstances), whether excused or unexcused, will receive a grade of E in the course.

GRADING

DEADLINES AND LATE POLICY

The first assignments for the course are due online on May 14th at 11:59pm. The remaining lab activities will be locked on Canvas until the safety contract is completed. If you miss any assignments due to not completing the contract, you will forfeit the grades.

Each week you will have pre-lab assignments and post-lab assignments. The pre-lab assignments will be due at 8:00am the day of your scheduled lab period. All other lab-related assignments are due by 11:59 pm the day of your scheduled lab period. All deadlnes are in EST.

Pre-lab assignments 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 deadline in case your computer's clock differs from official Canvas time.

Post-lab assignments that are submitted late will be deducted 25% credit per day that they are late. The penalty is applied even if the submission is received by Canvas one second past the 11:59pm 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. We do not recommend using the Canvas App to submit assignments - use a web browser to avoid issues.

GRADE BREAKDOWN

Each laboratory is comprised of a Pre-Lab quiz, a Pre-Lab Notebook grade, and a Post-Lab exercise. Each lab as a whole is weighted equally to your final grade. Within each lab exercise, assignments are weighted

according to the published point values in Canvas. If there is any confusion about this, please contact the course coordinator. Detailed information regarding each of these grading items is provided in Canvas.

Assignment weights are as follows:

Assignment Group	Weight %
Safety/Surveys/Syllabus	5%
Attendance/Participation	5%
10 Labs @ 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

LAB EXAM

Part of your course grade will be based on your performance on the Lab Exam. This is a timed and proctored exam that is scheduled for Monday, August 2nd starting at 8:00pm. You will have 1 hour complete the lab exam individually. It will assess skills/concepts that you have used throughout the semester.

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:
(1) Conflicts with other events: this should be rare, as the final exam is during the registrar scheduled lab period. Such reasons mayinclude 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 fromthe 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

This course uses Honorlock for proctoring of the lab exam. Honorlock is UF's designated online proctoring service for classroom exams and quizzes that were previously in person but have moved online as part of the COVID-19 response effort. In order for you to take exams in this course you will need a government issued photo ID (or your Gator-1 ID), a working camera and microphone on your computer, a stable internet connection, and the Google Chrome browser (https://chrome.com) on your computer. Before and during your exam you will need to follow the Honorlock proctor's instructions. Please familiarize yourself with the Honorlock student guide: https://dce.ufl.edu/media/dceufledu/pdfs/Honorlock-Student-Guide-UF-Update.pdf and the Honorlock Student Exam Preparation Information: https://dce.ufl.edu/media/dceufledu/pdfs/Honorlock-Student-Exam-Preparation-Information.pdf .

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.

EDUCATIONAL RESEARCH STUDY

This semester, CHM2046L 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. 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. 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. Participation does not influence your course grade in any way.

CONFLICTS

If you experience issues with CHM2045L that you cannot resolve with your TA, please contact the course coordinator. Don't wait until the end of term to resolve an ongoing issue.

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 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/.

OBJECTIVES/OUTCOMES/GOALS

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 assignments.

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.

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.