CHM2046L GEN CHEM II LAB UF ONLINE

SUMMER A 2023

INSTRUCTOR INFORMATION

Instructor	Email	Phone	Office Hours
Dr. Korolev	Email in Canvas	352-392-1087 (email preferred)	Virtual office hours available by appointment

GRADUATE TEACHING ASSISTANT

TBA in the first week of the semester. TAs will have weekly office hours throughout the semester.

AUDIO/VIDEO PRESENCE POLICY

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

GENERAL INFORMATION

COREQUISITES

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

COURSE DELIVERY AND MEETING TIMES

This course is delivered in a hybrid format. Students complete pre-lab and post-lab work online. Students attend in person labs June 5 – June 9 during the posted class meeting times. All due date times are in EST.

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.

LABS

Each week you may be asked to participate in a variety of activities including discussion board assignments, quizzes, graph creation, calculations, data analysis, etc. Introductory assignments are due the first week after Drop/Add – check Canvas for due dates. The pre-lab assignments for the in-person labs are due the second week of the course.

The in-person labs meet the week of June 5 - June 9. You are not permitted to enter the lab without proper safety attire, including approved eye protection. If you have familiarized yourself with the labs, you should be able to complete them within the lab period. If you have an unexcused absence for a lab, you will not be able to submit the post-lab assignments. Post-lab assignments are due one week after the labs.

COURSE MATERIALS AND SAFETY

REQUIRED MATERIALS

All UF students are expected to have reliable access to a computer, especially for an online course. The computer must have an internet connection, webcam, microphone, and Excel. Computer must meet UF's computing requirements and meet Honorlock's system requirements: honorlock.com/support.

A suitable laboratory notebook such as a standard composition notebook. Electronic notebooks not allowed.

Approved safety glasses/goggles and proper attire. You will be allowed to enter the lab if not properly attired. See the safety glasses requirements at https://otl.chem.ufl.edu/safety-glasses/

SAFETY

You are responsible for reviewing the safety information provided in Canvas. In addition, there is a series of safety-focused assignments in the course which are worth a dedicated portion of your grade.

DUE DATE SCHEDULE (SUBJECT TO CHANGE)

THEME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
WEEK 1: ORIENTATION WEEK	May 15 No assignments due; drop/add	May 16 No assignments due; drop/add	May 17 Discussion: Introductions	May 18 Syllabus Quiz Netiquette Quiz Pre-term Survey Practice Quiz	May 19 Safety Contract Safety Quiz Safety Photo Safety Assignment
WEEK 2: PRE-LAB ASSIGNMENTS DUE	May 22 Beer's Law Pre-Lab	May 23 Kinetics Pre-Lab	May 24 Equilibrium Pre-Lab	May 25 Le Chatelier Pre-Lab	May 26 Acids & Bases Pre-Lab
WEEK 3: PRE-LAB ASSIGNMENTS DUE	May 29 HOLIDAY	May 30 Titrations Pre-Lab	May 31 Thermodynamics Pre-Lab	June 1 Galvanic & Electrolytic Cells Pre-Labs	June 2 Transition Metals Pre-Lab
WEEK 4: IN-PERSON LAB WEEK	June 5 Beer's Law Lab Kinetics Lab	June 6 Equilibrium Lab Le Chatelier Lab	June 7 Acids & Bases Lab Titrations Lab	June 8 Thermodynamics Lab Galvanic & Electrolytic Cells Labs	June 9 Transition Metals Lab Lab Practical

WEEK 5: POST-LAB ASSIGNMENTS DUE	June 12 Beer's Law Post-Lab Kinetics Post-Lab	June 13 Equilibrium Post-Lab Le Chatelier Post-Lab	June 14 Acids & Bases Post-Lab Titrations Post-Lab	June 15 Thermodynamics Post-Lab Galvanic Cells Post-Lab	June 16 Electrochemical Cells Post-Lab Transition Metals Post-Lab
WEEK 6: FINISHING UP	June 19 HOLIDAY	June 20 STUDY FOR FINAL Practice Honorlock Quiz	June 21 STUDY FOR FINAL	June 22 FINAL LAB EXAM	June 23 GRADES SUBMITTED

ATTENDANCE INFORMATION

LAB PERIOD

You are expected to attend lab in-person during your scheduled lab period, and to leave the laboratory prior to the end of your lab period. 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 more than 15 min late, you will not be allowed to enter lab and will forfeit attendance points for the day. Any student who has an unexcused absence is not allowed to submit any during-lab and post-lab assignments related to the missed lab period.

ABSENCES FOR IN-PERSON LABS

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 must contact the instructor as soon as possible to discuss making up the missed lab in person.

Please understand that personal issues with scheduling conflicts, such as volunteering, work, non-emergency dentist or doctor appointments, exams for other courses, extracurricular activities, or travel, do not justify an excused absence. Any student who missed 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

DEALINES AND LATE POLICY

For best performance on Quizzes, use only Firefox or Chrome for quizzes. Chrome must be used for the Exam. 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 or computer issues. All date/times are in EST.

For all assignment submissions, the late penalty is applied even if the submission is received one second past the deadline, so be mindful of time. The late penalty is quite strict; 1 s after the deadline is penalized

as a full day late. 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.

All assignments submitted through Canvas can be turned in late for reduced credit, -25% per day submitted late, with the exception of the Final Lab Exam. Extensions will not be given because of technical or personal issues that occur within 24 hours of the assignment deadline. For extensions due to illness/emergency, a Dean of Students note must be provided for at least the 2 days prior to the assignment's deadline for accommodations to be considered.

RE-GRADES

All Canvas 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 3 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.

LAB PRACTICAL

Part of your course grade will be based on your performance on the Lab Practical. This is a timed and proctored in-lab assignment that is scheduled during one of your regular lab periods following the lab schedule. You will complete the lab practical individually and it will assess skills that you have used throughout the semester. More details regarding the lab practical will be posted on Canvas.

Absences will be handled in accordance with official UF academic regulations. For more information, see https://catalog.ufl.edu/UGRD/academic-regulations/ . 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 absence a make-up lab practical 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 lab practical.

LAB EXAM

A final lab exam will be available over a 4 hour period, 6pm-10pm EST, on June 22nd. The exam has a 2 hour time limit. The exam is a cumulative final exam that covers everything in the lab manual (the modules in Canvas). The final lab exam cannot be submitted late – it will be auto-submitted by 10pm on June 22nd.

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.

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. 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, 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.

GRADE BREAKDOWN

Each laboratory exercise is comprised of a Pre-Lab quiz, a Pre-Lab notebook assignment, a During-Lab Graph/Image, and a Post-Lab notebook assignment, 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 contact 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%
10 In-Person Labs (each weighted equally)	65%
Lab Practical	15%
Lab Exam	15%
Total	**100%**

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

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 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/.

INCLUSIVE LEARNING ENVIRONMENT

We embrace the University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinion or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act." We are committed to fostering an open and inclusive classroom and laboratory environment in our College, where every student, guest instructor and contributor feels valued. If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office on Multicultural & Diversity Affairs
Website: http://www.multicultural.ufl.edu/

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.

GETTING HELP

For issues with or technical difficulties with Canvas, contact the UF Help Desk: https://helpdesk.ufl.edu/ ; (352)-392-HELP.

Other resources are available at http://www.distance.ufl.edu/getting-help for Counseling and Wellness resources, disability resources, resources for handling student concerns and complaints, and library desk support.

GENERAL EDUCATION

Primary General Education Designation: Physical Sciences (P) (area objectives available here)

A minimum grade of C is required for general education credit. Courses intended to satisfy the general education requirement cannot be taken S/U.

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.

In CHM2046L, these objectives will be met in a variety of ways detailed below.

At the end of this course, students will be expected to have achieved the following learning outcomes in content, communication, and critical thinking:

Content: *Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline*. Students will acquire a basic knowledge of a variety of chemistry concepts and discipline specific terminology, including nomenclature, classification of reaction types, terminology related to the periodic table, and that used to describe energetics of reactions. Students acquire practical lab skills including safe handling of equipment, materials, and chemicals in the lab, and safe handling of laboratory waste, including hazardous waste. Achievement of this learning outcome will be assessed through quizzes, laboratory assignments, designated safety assignments, and the final lab exam.

Communication: *Students communicate knowledge, ideas, and reasoning clearly and effectively in written and oral forms appropriate to the discipline*. Students participate in discussion with other students and their TA/instructor throughout the semester. Students respond to prompts in writing in their laboratory notebooks. Students sketch diagrams of various forms, and draw chemical structures. Achievement of this learning outcome is assessed through student laboratory notebooks and related laboratory assignments, and the final lab exam and quizzes.

Critical Thinking: *Students analyze information carefully and logically from multiple perspectives, using discipline-specific methods, and develop reasoned solutions to problems.* Students formulate and express hypothes and use logic and reasoning to reflect on laboratory exercises. Students refer to scientific literature and databases and make inferences based upon experimental data. Achievement of this learning outcome is assessed by laboratory assignments, quizzes, and the final lab exam.

A complete list of student learning outcomes is posted in Canvas, organized by laboratory experiment.

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.