# CHM2045L GEN CHEM I LAB

FALL 2021

| COURSE COORDINATOR INFORMATION |                 |                               |  |  |  |
|--------------------------------|-----------------|-------------------------------|--|--|--|
| Instructor                     | Email           | Phone                         | Office Location & Hours                              |  |  |
| Mrs. Veige                     | Email in Canvas | 392-0518<br>(email preferred) | Office hours by<br>appointment; Office is<br>CCB 103 |  |  |

## LAB MANAGERS

Candace Biggerstaff and Jessica Webb. They can be contacted via Canvas email.

#### TEACHING ASSISTANT

To be assigned prior to your first scheduled lab session in CCB 110. You will meet your TA at the first scheduled lab session and they will provide you with their preferred methods of contact.

# 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

This course is delivered 100% face-to-face. All lab meetings occur during your scheduled lab time, beginning at the start of the block of time.

#### MEETING TIMES

CHM2045L meets once per week in CCB 110. Refer to your class schedule for your lab meet time.

#### 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 the week of September 7<sup>th</sup>. You have assignments due online the week prior. <u>The first</u> <u>deadline for online assignments is Thursday, September 2<sup>nd</sup> at 11:59 pm - check Canvas for details.</u> On the first day of lab, you will meet your TA and fellow classmates, and complete the first scheduled lab activity. You are not permitted to enter the lab without proper safety attire, including approved eye protection, or without being cleared for campus. 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 in Canvas. Each workstation inthe lab is equipped with a computer that allows access to eLearning to view the lab documentation, and to UF Apps.

Your attendance is recorded during the lab period. During or after the lab period, you will submit your post-lab assignments in Canvas for grading. Post lab assignments are due at 11:59 pm on your scheduled lab day.

# 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 <u>no make ups</u> or excused labs for attire issues.
- You will require a suitable laboratory notebook. Our recommendation is a standard composition notebook.
- All UF students are expected to satisfy the UF computing requirement and have access to a computer with an internet connection. You will also require Excel.

## REQUIREMENTS FOR HONORLOCK PROCTORED EXAM

You are required to have a functioning webcam, microphone, and speakers for proctored exams. See the minimum technical requirements at <u>honorlock.com/support</u>. Ensure your computer system meets their minimum system requirements. You are also required to have a handheld mirror/reflective surface for proctoring.

#### 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. Anyone without the necessary safety glasses, or who is inappropriately attired, will not be allowed into the lab. Students not cleared for campus will not be allowed to enter lab. Students are expected to wear approved face coverings at all times within the lab. No gum chewing or headphones are permitted. If you are asked to leave the lab due to improper attire, you will not be permitted a makeup. You can leave and return as long as you return within 15 min of the start of your lab 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. 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 | FRIDAY      |  |
|----------------|------------------------|--------------|-----------|----------|-------------|--|
| Aug. 23-27     | NO LABS                |              |           |          |             |  |
| Aug. 30-Sept.  | NO LABS                |              |           |          |             |  |
| 30             |                        |              |           |          |             |  |
| Sept. 6-10     | HOLIDAY                | DENSITY LAB  |           |          |             |  |
| Sept. 13-17    | DENSITY                | HYDRATES     |           |          |             |  |
| Sept. 20-24    | STOICHIOMETRY          |              |           |          |             |  |
| Sept. 27-Oct.  | GASES                  |              |           |          |             |  |
| 1              |                        |              |           |          |             |  |
| Oct. 4-8       | CALORIMETRY HOLIDAY    |              |           |          |             |  |
| Oct. 11-15     | BEER'S LAW             |              |           |          |             |  |
| Oct. 18-22     | KINETICS               |              |           |          |             |  |
| Oct. 25-29     | ELECTROLYTES           |              |           |          |             |  |
| Nov. 1-5       | LEWIS                  |              |           |          |             |  |
| Nov. 8-12      | HYDRATES               | NO LAB       |           | HOLIDAY  | CALORIMETRY |  |
| Nov. 15-19     | COLLIGATIVE PROPERTIES |              |           |          |             |  |
| Nov. 22-26     | FLEX D                 | DAYS HOLIDAY |           |          |             |  |
| Nov. 29-Dec. 3 | FLEX DAYS              |              |           |          |             |  |
| NUV. 29-Dec. 5 |                        |              |           |          |             |  |

This lab schedule is subject to change; students should keep their schedule free during their scheduled lab period throughout the semester. Flex days may be used if regularly scheduled lab days need to be rescheduled. Such situations will be clearly announced via Canvas Announcements. It is the students' responsibility to read the Canvas announcements.

Final Lab Exam is scheduled during our scheduled time during finals week, Dec. 15<sup>th</sup> 12:30pm-2:30pm.

# ATTENDANCE INFORMATION

## LAB PERIOD

You are expected to attend lab in person 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 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 post-lab assignments related to the missed lab period.

## ABSENCES

Requirements for class attendance in this course are consistent with university policies that can be found at: <u>https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/.</u>

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. Excused absences are not granted for exams or makeup exams for other classes. Missing lab due to improper lab attire does not qualify for an excused absence. Emailed requests to "preview" excused absences are 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 a makeup lab within 7 d of the missed lab session. To have a request considered for approval, you must (1) complete the Absence Request Form 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.

Any student who missed <u>more than two</u> 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

# DEADLINES AND LATE POLICY

You will have a partner for lab, but all assignments are submitted and graded individually. Each student must submit each required assignment to receive a grade.

The first assignments for the course are due online on September 2nd 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 deadlines 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. If you encounter technical issues, you can contact the Help Desk at 352-392-4357.

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. Extensions will not be given because of technical or personal issues that occur within 24 hours of the assignment deadline.

## EXAM

A multiple-choice lab exam will be administered during our scheduled final exam time, proctored remotely by Honorlock.

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: 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 <u>at least one week</u> prior to the scheduled exam and an early conflict exam will be scheduled for you (<u>before</u> the regularly scheduled exam date/time).

(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 <a href="http://www.honorlock.com/extension/install">www.honorlock.com/extension/install</a>.

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 <u>support@honorlock.com</u>. 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 <a href="https://dce.ufl.edu/services/online-proctoring/">https://dce.ufl.edu/services/online-proctoring/</a>.

## 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/Surveys/Syllabus Quiz   | 5%       |
| Lab Assignments (10 @ 8% each) | 80%      |
| Lab Quiz (during finals week)  | 15%      |

Grade scale (note: there is <u>no</u> rounding to your score in Canvas):

| Letter | Α    | A-   | B+   | В    | B-   | C+   | С    | 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**

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. The notebook must be scanned/photographed 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, <u>must</u> 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, 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. 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.

# UNIVERSITY POLICIES

#### COVID PRACTICES

In response to COVID-19, the following practices are in place to maintain your learning environment, to enhance the safety of our in-classroom interactions, and to further the health and safety of ourselves, our neighbors, and our loved ones:

If you are not vaccinated, get vaccinated. Vaccines are readily available at no cost and have been demonstrated to be safe and effective against the COVID-19 virus. Visit this link for details on where to get your shot, including options that do not require an

appointment: <u>https://coronavirus.ufhealth.org/vaccinations/vaccine-availability/</u>. Students who receive the first dose of the vaccine somewhere off-campus and/or outside of Gainesville can still receive their second dose on campus.

You are expected to wear approved face coverings at all times during class and within buildings even if you are vaccinated. Please continue to follow healthy habits, including best practices like frequent hand washing. Following these practices is our responsibility as Gators.

Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class. Hand sanitizing stations will be located in every classroom.

If you sick, stay home and self-quarantine. Please visit the UF Health Screen, Test & Protect website about next steps, retake the questionnaire and schedule your test for no sooner than 24 hours after your symptoms began. Please call your primary care provider if you are ill and need immediate care or the UF Student Health Care Center at 352-392-1161 (or email covid@shcc.ufl.edu) to be evaluated for testing and to receive further instructions about returning to campus. UF Health Screen, Test & Protect offers guidance when you are sick, have been exposed to someone who has tested positive or have tested positive yourself. Visit the UF Health Screen, Test & Protect website for more information.

Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work.

If you are withheld from campus by the Department of Health through Screen, Test & Protect you are not permitted to use any on campus facilities. Students attempting to attend campus activities when withheld from campus will be referred to the Dean of Students Office.

Continue to regularly visit coronavirus.UFHealth.org and coronavirus.ufl.edu for up-to-date information about COVID-19 and vaccination.

#### STUDENTS REQUIRING ACCOMMODATIONS

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting disability.ufl.edu/students/get-started. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

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: <a href="http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php">http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php</a>."

## CAMPUS RESOURCES

U Matter, We Care: If you or someone you know is in distress, please contact <u>umatter@ufl.edu</u>, 352-392-1575, or visit <u>U Matter, We Care website</u> to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the <u>Counseling and Wellness Center website</u> or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the <u>Student Health Care Center website</u>.

University Police Department: Visit <u>UF Police Department website</u> or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the <u>UF Health Emergency</u> <u>Room and Trauma Center website</u>.

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the <u>GatorWell website</u> or call 352-273-4450.

## ACADEMIC RESOURCES

E-learning technical support: Contact the <u>UF Computing Help Desk</u> at 352-392-4357 or via e-mail at <u>helpdesk@ufl.edu</u>.

<u>Career Connections Center</u>: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

<u>Teaching Center</u>: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the <u>Student Honor Code and Student Conduct Code webpage</u> for more information.

On-Line Students Complaints: View the Distance Learning Student Complaint Process.

## FEEDBACK

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. A detailed guide is posted under the *Settling In* section in Canvas.

## GETTING HELP

For issues with or technical difficulties with Canvas, contact the UF Help Desk: <u>https://lss.at.ufl.edu/help.shtml</u>; (352)-392-HELP.

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

# CONFLICTS

If you experience issues with CHM2046L that you cannot resolve with your TA, please see Mrs. Veige 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.

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  |  |  |  |
|-------------------|---|--|--|--|--|
| CONTENT           | Content is knowledge of the concepts,<br>principles, terminology and methodologies<br>used within the discipline. | Students demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.   |  |  |  |
| COMMUNICATION     |   | Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.                                     |  |  |  |
| CRITICAL THINKING |   | Students analyze information carefully and<br>logically from multiple perspectives, using<br>discipline specific methods, and develop<br>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 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. 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.