CHM2045L: GEN CHEM I LAB, SPRING 2019

INSTRUCTOR INFORMATION

Course Coordinator Email Office Location & Hours

Dr. Mendez Polanco Email via Canvas JHH 302A / TBA

LAB MANAGERS

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

TEACHING ASSISTANT

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

GENERAL INFORMATION

COREQUISITES

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

MEETING TIMES

CHM2045L meets once per week in JHH 110. The meeting time can be found on your schedule in ONE.UF.

DESCRIPTION/GOALS

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. This lab serves as both a general education requirement and major's course while teaching the scientific method, skills for problem solving, general chemistry knowledge, and a connection to the principles that govern the natural world.

FIRST DAY OF LAB

Lab will start meeting the week of January 22nd, but you have assignments due online before this date. The first deadline for online assignments is January 18th - check Canvas for details. On the first day of lab, you will meet your TA and be assigned to your laboratory workstation.

- You will have a <u>safety training/orientation</u> during the first lab period and complete a short lab activity.
- You must have completed the <u>online safety contract</u> (before start of the semester) and be <u>dressed</u> <u>in proper lab attire</u> to enter the lab *every time*, *no excuses*. Safety is taken seriously in this class, and no disruptive behaviour that may endanger you or your classmates will be tolerated.

- Prior to attending each lab period, you must familiarise yourself with the lab background and procedure and complete a Pre-Lab quiz.
- You should also make relevant data tables in your lab notebook and print a copy of the procedure if desired paper/print copies of the manual are not provided. Each workstation in the lab is equipped with a monitor that allows access to eLearning to view the lab documentation, and to UF Apps.

COURSE MATERIALS AND SAFETY

REQUIRED MATERIALS

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

GOGGLES AND ATTIRE

You must be wearing department approved safety glasses or goggles and be properly attired to be admitted to the laboratory at all times, from the very first meeting day. Check the Canvas course pages for information on attire and the types of eye protection approved for use in this lab. Anyone without the necessary safety glasses, or who is inappropriately attired, will not be allowed into the lab. If you are asked to leave the lab due to improper attire, you will not be permitted a makeup. You can, however, leave and return as long as you return within 30 minutes of the start of the period.

SAFETY

You are responsible for reviewing the safety information provided in Canvas. Note that you must satisfactorily <u>complete the Safety Contract on Canvas</u>: None of the activities worth credit for the course will be available in Canvas until you comply.

LOGISTICS/CLEANLINESS

You will work in pairs to complete the laboratory activities. You should check your group's glassware for cleanliness before beginning the lab. Your group <u>must wash the glassware/equipment and your workstation before leaving</u>. You may not sign the attendance sheet until your TA has checked your station. If any glassware is broken during the lab session, communicate this immediately to your TA so it can be replaced/cleaned up.

LAB SCHEDULE (Tentative, may be subject to change)

CHM2045L SPRING 2019

DATES	MONDAY	TUESDAY WEDNESDAY		THURSDAY		
Jan. 7-10	NO LABS					
Jan. 14-17	NO LABS					
Jan. 21-24	HOLIDAY Orientation & Density Lab					
Jan. 28-31	Density Lab	Hydrate Lab				
Feb. 4-7	Stoichiometry Lab					
Feb. 11-14	Gases Lab					
Feb. 18-21	Calorimetry Lab					
Feb. 25-28	Dilutions Lab					
Mar. 4-7	NO LABS – SPRING BREAK					

Mar. 11-14	Kinetics Lab			
Mar. 18-21	Electrolytes Lab			
Mar. 25-28	Lewis Structures Lab			
Apr. 1-4	Colligative Properties Lab			
Apr. 8-11	Hydrates Lab	Hydrates Lab NO LABS		
Apr. 15-18	MAKE UP WEEK			
Apr. 22-25	NO LABS			

^{*}Assignments are due in Canvas before labs start ---Check Canvas for details.

ATTENDANCE INFORMATION

LAB PERIOD

You are expected to attend lab during your scheduled lab period, and to leave the laboratory when the lab period ends. Everyone is given the same amount of time to complete the experiments. If you are well-prepared, you should not experience difficulties completing the experiments within the allotted timeframe. You may <u>not arrive early, stay late, or attend during a different lab period</u> to complete your laboratory activities. You will not be allowed to enter lab if you are more than 30 minutes late. If you are more than 30 minutes late due to an extreme circumstance beyond your control, you may submit a request for a make-up (see the absences policy below).

LAB ATTENDANCE

Attendance is critical for this course. In each laboratory, you will learn techniques and concepts that will continue to be important throughout the semester and in your future labs beyond this semester. It is essential that you are present and prepared for lab every time.

Your TA will take careful attendance each lab period while circulating during the lab period and grading notebooks. You must <u>sign your name on the attendance sheet</u> during each lab period - <u>this is your responsibility</u>, not the TA's. If you aren't sure whether or not you've signed the attendance sheet, check with your TA and do so before leaving.

If you are not in attendance you will receive a score of 0 for your Lab Notebook and on other lab related assignments for that period. *The signed attendance sheet is the official attendance record!*

ABSENCES

Students who must miss lab due to extreme circumstances beyond their control may submit a request for make-up within 7 days (e.g., if you miss a Tuesday lab, you must submit your request by 11:59 pm the following Monday through Canvas, as directed) of the missed lab period. Make ups for absences for the last scheduled lab must be requested prior to make up week to ensure scheduling.

Please understand that personal issues with scheduling conflicts, such as volunteering, work, non-emergency dentist or doctor appointments, extracurricular activities, or travel, do not qualify for an excused absence. To have a request considered for approval, you must (1) provide a completed request form (found on Canvas) via email to your coordinator (Dr. Mendez Polanco) through Canvas; and (2) request an excuse note from the Dean of Students Office if missing lab due to illness or emergency. After one week, the absence will be considered unexcused and you will receive a score of 0 and not be permitted a make-up.

Email requests to "preview" excused absences will not be; it should be very clear what constitutes an excused absence. If you know in advance that you will need to miss a lab session, please submit your request as early as you can, even in advance. Requirements for class attendance and make-ups in this course are consistent with university policies that can be found in the <u>Undergraduate Catalog</u>.

<u>Any student who misses more than three</u> lab sessions (excluding religious observances), whether excused or unexcused, will receive a grade of E in the course.

The first excused absence for a student will be rescheduled during make-up week at the end of term during your regular lab period. Subsequent requests will also be scheduled during make-up week. <u>It is your responsibility</u> to accommodate your schedule for make-up labs during the regular lab sessions.

GRADING

ASSIGNMENTS AND LATE-WORK POLICY

All assignments are due on a specific date/time, with penalties for late submission accordingly (even one second late, or due to any differences in time between your own computer and the EST).

Pre-lab quizzes are due at 8 am the day of a student's scheduled lab period. The post-lab quiz is due at 8 am the following week on a student's regular lab day. Quizzes cannot be completed late for any credit. For best performance, use only Firefox or Chrome for quizzes. Make sure you start well in advance of the due date/time, in case your computer's clock differs from official Canvas time. All due dates/times are in EST.

All other lab-related assignments are also due by 8 am the following week on the student's regular lab day and, when possible, can be considered for 50% credit if submitted late but prior to 11:59 pm that day. The penalty is applied even if the submission is received by Canvas one second past the 8 am deadline, so be mindful of time. Emailed assignments are not considered for grading. We highly recommend you submit assignments early and verify they've been submitted through Canvas. If you have personal computer issues there are computers on campus available for student use.

There are exceptions to due dates for lab assignments due to holidays and make-up week. Should a student's next regular lab day be a university holiday, all post-lab assignments will be due at 8 am the following weekday classes are in session. Post-lab assignments due for labs performed during make up week are all due at 8 am on April 24th, the last day of the semester, to enable time for grading.

GRADE BREAKDOWN

Each laboratory exercise is comprised of a Pre-Lab quiz, a Notebook grade, a Post-Lab exercise, and various other assignments specific to that lab. Each lab exercise as a whole is weighted equally to your final grade. Within each lab exercise, assignments are weighted according to the published point value. If there is any confusion about this, please see the instructor. Detailed information regarding each of these grading items is provided in Canvas. Assignment weights are as follows:

Assignment Group					Weight %						
Safety/Surveys/Syllabus Quiz					3%						
10 Labs @ 9.7% each					97%						
Grade scale (note: there is <u>no</u> rounding to your score in Canvas):					C	D+	D	D-	F		
Letter	Α	A-	B+	В	B-	C+		υ+	ע	υ-	Е
Cutoff	≥92.0	≥88.0	≥84.0	≥80.0	≥76.0	≥72.0	≥68.0	≥64.0	≥60.0	≥56.0	<56.0

RE-GRADES

All lab assignment grades are graded by your TA so you should communicate any lab notebook grade disputes to your TA. Your TA will address your concerns at that time and make any necessary corrections. If your TA finds it necessary to re-grade your lab notebook, he/she will correct the grade on your notebook and on his/her grade sheet immediately. The notebook must be scanned and submitted to Canvas to the relevant assignment in order for points to be considered toward your course grade.

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

UNIVERSITY POLICIES

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES

Students requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida. The following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: 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 feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

CONFLICTS

If you experience issues with CHM2045L that you cannot resolve with your TA, please see Dr. Mendez Polanco in person. Do Not wait until the end of term to resolve an ongoing issue.

GENERAL EDUCATION

This course satisfies the General Education requirement in the Physical Sciences.

PHYSICAL SCIENCE GENERAL EDUCATION PROGRAM OBJECTIVES

Physical science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the physical sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern physical systems.

Students will formulate empirically-testable hypotheses derived from the study of physical processes, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.

These objectives are accomplished through participation in the lab sections, and individual work done on homework assignments and assessments.

GENERAL EDUCATION STUDENT LEARNING OUTCOMES

Area	Institutional Definition	Institutional SLO			
CONTENT	Content is knowledge of the concepts, principles, terminology and methodologies 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	Critical thinking is characterized by the comprehensive analysis of issues, ideas, and evidence before accepting or formulating an opinion or conclusion.	logically from multiple perspectives, using			

All three areas of learning outcomes will be assessed in all categories of graded assignments.

SPECIFIC GOALS OF CHM2046L

You will be required to analyse 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 utilise the methods of science as a logical means of problem solving through critical thinking. This means you must analyse 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 be adjusted/changed as the semester progresses, which is not unlikely, then the changes will be communicated to the class clearly.