

# CHM2046L GEN CHEM II LAB

SPRING 2018

## INSTRUCTOR INFORMATION

Instructor	Email	Office Location & Hours
Mrs. Veige	Email in Canvas <u>only</u>	See the Syllabus page in Canvas for office hours; Office is JHH 103

Lab Managers	Contact	Office Location
Donna Turner Candace Biggerstaff	In lab JHH 110	Lab stockroom

## TEACHING ASSISTANT

To be assigned during first laboratory meeting; a full list of sections and corresponding TAs will be posted on the Syllabus page in Canvas when available.

## GENERAL INFORMATION

### COREQUISITES

CHM2046L is to be taken with CHM2046 or CHM2051 (Honors). Detailed prerequisite information and credit suitability can be found in the Undergraduate Catalog.

### MEETING TIMES

CHM2046L meets once per week in JHH 110.

### 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.

### FIRST DAY OF LAB

Lab will commence the week of January 15<sup>th</sup>, 2017. On the first day of lab, you will meet your TA and be assigned to your laboratory workstation. You will undergo safety training/orientation during the first lab period. Prior to attending the second (and each subsequent) lab period, you must familiarize yourself with the lab background and procedure and complete the Pre-Lab quiz. You should also make relevant notes

and 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 the UF Apps (this includes Excel).

## 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 no make ups for attire issues.
- 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, including on the first day of lab. 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 during the lab period with required attire and complete as much of the lab as possible within the allotted time. There will be a grade penalty if a significant portion of the lab period is missed.

### 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. Your group must wash the glassware/equipment and your workstation before leaving. 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 (SUBJECT TO CHANGE)

Dates	Monday	Tuesday	Wednesday	Thursday
Jan. 8-12	NO LABS – DROP/ADD*			
15-19	HOLIDAY – NO LAB	ORIENTATION; SAFETY		
22-26	Orientation & Safety	Beer's Law		
29-Feb. 2	Beer's Law & Equilibrium	Equilibrium		
5-9	Le Chatelier			
12-16	Acid/Base I			
19-23	Acid/Base II			
26-Mar. 2	NO LABS			
5-9	SPRING BREAK – NO LABS			
12-16	Salts and Buffers			
19-23	Thermodynamics			
26-30	Activity Series			
Apr. 2-6	Galvanic Cells			
9-13	Lab Topic TBA			
16-20	MAKE UP WEEK			
23-27	NO LABS			

## 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 not arrive early, stay late, or attend during a different lab period to complete your laboratory activities.

### LAB ATTENDANCE

Attendance in the General Chemistry lab is critical for this course. Each laboratory period, you will learn techniques and concepts that will continue to be important throughout the semester. It is essential that you be present and prepared for lab each time that it convenes.

Your TA will take careful attendance each lab period while circulating during the lab period and grading notebooks. You must sign your name on the attendance sheet during each lab period - *this is your responsibility*, 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 for that period. **The signed attendance sheet is the official attendance record - make sure you sign each lab period!**

## ABSENCE

Students who must miss lab due to extreme circumstances beyond their control may submit a request for make-up within 7 days (this means 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. 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 an excused absence. To have a request considered for approval, you must (1) provide a completed request form, available in the Canvas site - email the form to your coordinator (Mrs. Veige) through Canvas; and (2) request an excuse note from the Dean of Students Office. We have the Dean of Students Office verify excused absences for us. They do so in a confidential manner, and simply inform instructors that an excused absence due to health reasons or family emergency has occurred. See the Dean of Students Office website for details. After 1 week, the absence will be considered unexcused and you will receive a score of 0.

Emailed requests to "preview" excused absences will be ignored; 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 [Undergraduate Catalog](#).

Any student who missed more than three 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.

## 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 me. Detailed information regarding each of these grading items is provided in Canvas.

Assignments weights are as follows:

Assignment Group	Weight %
Safety	2.5%
Surveys	2.5%
To do before Lab 1	5.0%
9 Labs @ 10.0% each	90.0%

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	90.0	87.0	84.0	77.0	73.0	70.0	62.0	59.0	56.0	50.0	< 50.0

#### RE-GRADES: LAB NOTEBOOK

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.

#### LATE PENALTIES

Pre- and post-lab quizzes cannot be turned in late for credit. Each is available for at least one full week for each student to complete. Pre-lab quizzes are closed at 11:59 pm (sharp!) EST the night before each scheduled lab. Make sure you start well in advance of the due date/time, in case your computer's clock differs from official Canvas time.

For assignments uploaded to Canvas - this might include graphs, pictures, lab notebook copies, etc. - assignments submitted up to 48 h late will be penalized 50%. The penalty is applied if an assignment is submitted even 1 sec late, so be careful. After 48 h the assignments cannot be completed for credit. This is a firm course policy set by the instructor. Each assignment (not the quizzes, just the assignment submissions) has a "due date" and an "accepted until" date in Canvas to allow for such late submissions. After the 48 h late window has expired, the assignments are closed and no further submissions will be accepted.

#### 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](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 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 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.

## 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 CHM2046L.

### SPECIFIC GOALS OF CHM2046L

You will be required to analyze scientific concepts and think critically. This means being able to answer both quantitative (mathematical) and conceptual (quantitative) 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.