CHM2046L GEN CHEM II LAB, SUMMER 2020

INSTRUCTOR INFORMATION

COURSE COORDINATORS

The course coordinator for Summer A is Dr. Korolev and the course coordinator for Summer B is Dr. Lopez. You can contact the course coordinators via Canvas email. Virtual office hours are 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 TIMES

CHM2046L 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, 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 start meeting synchronously online via Zoom the week of May 19th, 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 turn in 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 requisite 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 will 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.

LAB SCHEDULE (SUBJECT TO CHANGE)

| DATES | TUESDAY | WEDNESDAY | THURSDAY | |
|------------------|------------------------------------------------|--------------------|----------|--|
| May 11 - 15 | First Assignments Due: May 14 th | | | |
| May 18 - 22 | Beer's Law Lab | | | |
| May 25 - 29 | Kinetics Lab | | | |
| June 1 - 5 | Equilibrium Constant Lab | | | |
| June 8 - 12 | Le Chatelier Lab | | | |
| June 15 - 19 | Acids & Bases Lab | | | |
| June 22 - 26 | Summer Break | | | |
| June 29 - July 3 | Summer Break | | | |
| July 6 - 10 | Titrations Lab | | | |
| July 13 - 17 | Thermodynamics Lab | | | |
| July 20 - 24 | | Galvanic Cells Lab | | |
| July 27 - 31 | Electrolytic Cells Lab | | | |
| Aug 3 - 7 | Transition Metals Lab | | | |
| Aug 10 - 14 | Lab Practical: Tuesday August 11 th | | | |

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 5 minutes late, then you forfeit your attendance and participation points for the day. You are still responsible for completing the lab and turning in the lab assignments even if you are not present. To account for technical issues, one day of attendance/participation points will be dropped for all students. All further absences will be marked as a 0.

ABSENCES

Students who miss lab deadlines due to extreme circumstances beyond their control may submit a request for a deadline extension within 3 days of the missed deadline. 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 a deadline extension. To have a request considered for approval, you must (1) provide a completed request form (found on Canvas) via email to your coordinator through Canvas; and (2) request an excuse note from the Dean of Students Office if due to illness/emergency. Requirements for class attendance and make-ups in this course are consistent with university policies that can be found in the Undergraduate Catalog.

GRADING

DEADLINES AND LATE POLICY

The first assignments for the course are due online on May 14th at 11:59pm. These assignments include a practice quiz, syllabus quiz, safety quiz, practice assignment, and safety contract. 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. These will begin the week of May 18th.

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 deadline in case your computer's clock differs from official Canvas time. All due dates/times are in EST.

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.

GRADE BREAKDOWN

Each laboratory is comprised of a Pre-Lab quiz, a Pre-Lab Notebook grade, a Post-Lab exercise, and an Attendance/Participation score. 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 @ 8.0% each | | | | 80% | | | | | | | |
| Lab Practical Assignment | | | | 10% | | | | | | | |
| Grade so | ale (note | : there is | <u>no</u> roundi | ng to you | r score in | Canvas): | | | | | |
| Letter | Α | A - | B+ | В | B- | C+ | С | D+ | D | D- | Е |
| Cutoff | ≥93.0 | ≥90.0 | ≥86.0 | ≥83.0 | ≥80.0 | ≥76.0 | ≥70.0 | ≥66.0 | ≥63.0 | ≥60.0 | <60.0 |

LAB PRACTICAL

Part of your course grade will be based on your performance on the Lab Practical. This is a timed and proctored assignment that is scheduled for Tuesday, August 11th starting at 7:00pm. You will have 1 hour complete the lab practical individually. It will assess skills that you have used throughout the semester.

This course uses Honorlock for proctoring of the lab practical. 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, <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.

CONFLICTS

If you experience issues with CHM2046L 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. | · · · · · · · · · · · · · · · · · · · |
| COMMUNICATION | ENGINEERING (1995) 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1995 1 | 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. | |

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

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 (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.