

## CHM2045L – General Chemistry I Lab for Engineers – Fall 2018

**Instructor:** Dr. Maria Korolev

Email (for administrative purposes): Email through Canvas

Office hours: T&R periods 7 & 8 in Keene-Flint 251/258

**Lab Managers:** Donna Turner and Candace Biggerstaff (located in the stockroom of JHH 110)

**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. TAs hold weekly office hours in JHH 105, the schedule will be posted on Canvas and on the door of JHH 105. You can email your TA through Canvas.

**Meeting times:** CHM2045L meets weekly in JHH110. The time can be found on your schedule in ONE.UF.

**Course Objectives:** The general objectives of this course are to introduce you to common laboratory techniques and equipment used in a laboratory, to help you gain understanding and proficiency in their use, to help you explore the process of doing experimental chemistry, and to illustrate representative examples of the useful and important topics you are learning in CHM2045/CHM2095 lectures.

**Course Information:** Some sections of CHM2045L are specific sections targeted to students who are engineering majors. These sections of CHM2045L contain three-week long laboratory projects that apply chemistry principles to engineering problems.

**Required Materials:** Approved safety goggles/glasses and proper attire. Information about these can be found on Canvas. You will be asked to leave the lab if not properly attired. 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.

**First Day of Lab:** Lab will commence on September 4th. You have assignments due before this – check Canvas for details. On the first day of lab, you will meet your TA and be assigned to your laboratory workstation. You will undergo safety training/orientation and complete a lab activity. You will not be allowed to enter lab unless you are dressed in proper lab attire and have completed the online safety contract. Prior to attending each lab period, you must familiarize yourself with the lab background and procedure and complete the Pre-Lab quiz. In lab, each workstation is equipped with a monitor that allows access to eLearning to view the lab documentation, and to UF Apps.

**Lab Schedule (subject to change):**

| Dates          | Monday  | Tuesday   | Wednesday | Thursday |
|----------------|---|---|-----------|----------|
| Aug 22 - 24    | NO LABS   |   |           |          |
| Aug 27 - 31    | NO LABS   |   |           |          |
| Sept 3 - 7     | HOLIDAY   | Safety & Orientation                              |           |          |
| Sept 10 - 14   | DC0: Restore and Improve Urban Infrastructure     |   |           |          |
| Sept 17 - 21   | DC1: Provide Access to Clean Water Phase 1        |   |           |          |
| Sept 24 - 28   | DC1: Provide Access to Clean Water Phase 2        |   |           |          |
| Oct 1 - 5      | DC1: Provide Access to Clean Water Phase 3        |   |           |          |
| Oct 8 - 12     | DC2: Make Solar Energy Economical Phase 1         |   |           |          |
| Oct 15 - 19    | DC2: Make Solar Energy Economical Phase 2         |   |           |          |
| Oct 22 - 26    | DC2: Make Solar Energy Economical Phase 3         |   |           |          |
| Oct 29 - Nov 2 | DC3: Develop Carbon Sequestration Methods Phase 1 |   |           |          |
| Nov 5 - 9      | DC3: Develop Carbon Sequestration Methods Phase 2 |   |           |          |
| Nov 12 - 16    | HOLIDAY   | DC3: Develop Carbon Sequestration Methods Phase 3 |           |          |
| Nov 19 - 23    | DC3: Phase 3                                      | NO LABS   |           |          |
| Nov 26 - 30    | MAKEUP WEEK                                       |   |           |          |
| TBD*           | Written Lab Quiz                                  |   |           |          |

\*The written lab quiz will be given during an evening assembly exam time (sometime Nov 26 - Dec 5)

**Grading:**

Grades for the term will be determined as follows:

| Category: | Lab Notebooks | Pre-Lab Quizzes | Written Lab Quiz | Safety/Syllabus | Surveys |
|-----------|---------------|-----------------|------------------|-----------------|---------|
| Weight:   | 50%           | 20%             | 20%              | 5%              | 5%      |

The following grade cutoffs will be used:

| A   | A-  | B+  | B   | B-  | C+  | C   | D+  | D   | D-  | E    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 90% | 86% | 83% | 80% | 77% | 73% | 69% | 66% | 63% | 60% | <60% |

Information on current UF grading policies for assigning grade points can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

**Lab Notebook:** During lab meeting time, students will work in teams on the lab assignment for that day. Teams will complete a lab notebook that will be uploaded and graded through Canvas (all students must upload this lab notebook individually). The lab notebook assignments are due by 11:59pm the following day after the lab period. They must be received on Canvas; emailed assignments are not considered for grading. If you have personal computer issues, you should contact the UF Help Desk or use public computers on campus.

Students who have an unexcused absence will receive a zero for the day's notebook assignment.

Students who miss significant lab time will be deducted points on their lab notebook that day.

**Pre-Lab Quizzes:** Pre-lab quizzes are due at 8am the day of a student's scheduled lab period. Quizzes cannot be completed late for any credit. The lowest pre-lab quiz grade will be dropped at the end of the semester.

**Written Lab Quiz:** This written quiz will be scheduled at night like a typical assembly exam. It will assess the graphical and analytical skills that were taught and used throughout the semester. The date and location of the quiz will be announced midway through the semester. Students who have a conflict with the scheduled quiz time must contact the instructor at least 1 week in advance.

**Surveys:** The lab activities in the engineering sections of CHM2045L are part of an initiative to improve this section of general chemistry lab, and are tied to a research grant. Due to this, you will need to complete a consent form as well as respond to pre- and post-semester surveys. Your compliance with the surveys will be worth points that contribute to your overall lab grade.

**Attendance:** Attendance in the general chemistry laboratory is critical for this course. Your TA will take careful attendance each period while circulating the lab during the lab period. You must sign your name on the attendance sheet during each lab period – this is your responsibility. The signed attendance sheet is the official attendance record, not your individual notebook.

**Absences:** Students who must miss lab due to extreme circumstances beyond their control may submit a request for a make-up lab within 7 days of the missed lab period. Make ups for the absences for the last scheduled lab must be requested prior to makeup 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 justify 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. Korolev) 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.

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 misses more than three lab sessions (excluding religious observances), whether excused or unexcused, will receive a grade of E in the course.

**Proper attire:** Students must wear approved safety goggles and proper attire (see Canvas for more info). Any students who do not bring their safety goggles or wear proper attire will be sent back to change.

**Honor Code:** UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students 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.” The Honor Code

(<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

**Canvas** (<http://elearning.ufl.edu>): Here you will find the syllabus, gradebook, files, class announcements, and other pertinent info for the course. It is your responsibility to check Canvas often to make sure that you do not miss important announcements and to ensure that your gradebook is accurate. For computer assistance, visit <http://helpdesk.ufl.edu/>.

**Disability Accommodations:** Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <http://www.dso.ufl.edu/drc/>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodations for quizzes or exams.

**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/>.

**General Education Requirements:** This course satisfies the general education program requirements for the physical sciences at the University of Florida. More information regarding the program objectives, student learning outcomes, and specific goals for CHM2045/CHM2046 can be found in the *General Education Program Requirements* document found on Canvas.

**Disclaimer:** This syllabus represents my current plans and objectives. If those need to change as the semester progresses, then the changes will be communicated to the class clearly.