



**SOUTH FLORIDA STATE COLLEGE**  
**Division of Arts and Sciences**  
**COURSE SYLLABUS**

**Spring Term 2023**  
**CHM 2045C/L GENERAL CHEMISTRY I/Lab (4 Credits)**

**Welcome** – CHM2045 is the first of two general chemistry courses designed to provide a strong chemistry foundation for undergraduate students majoring in chemistry, biochemistry, medical, nursing and other “hard” science fields. The major objective is to develop a thorough understanding of chemistry and how it relates to everyday life.

**Catalog Description:** In this course, you will study the principles of chemistry, atomic and molecular structure, the periodic system, stoichiometry, bonding, thermochemistry, gas laws, solutions, formulas, and equations. **Pre- or Corequisite: MAC 1105 or Instructor’s Approval. Corequisite: CHM 2045L.**

**Course Specific Outcomes:** Upon successful completion of this course, students will be able to (\*Indicates Using [Math](#)):

- Use scientific reasoning to assess causal relationships
- Evaluate previous experimentation and scientific results
- \*Use scientific perspectives to explore contemporary problems in our society
- Differentiate between accuracy and precision in measurements
- \*Report measurements and calculations to the correct number of significant figures
- \*Solve problems using the Unit-Label/Dimensional Analysis method
- Discuss the structure of the atom and organization of the periodic table
- Predict properties of elements based on the trends of the periodic table
- \*Name molecular and ionic compounds and write their correct formulas
- \*Solve problems using mole relationships
- \*Balance chemical equations and predict products of chemical reactions
- \*Use balanced chemical equations to solve stoichiometry problems
- \*Write net ionic equations for double replacement reactions
- \*Identify and balance redox reactions using the half-reaction method
- \*Solve problems using solution concentration
- \*Solve problems using the gas laws
- Name and categorize organic molecules

**Prerequisites:** Pre- or Corequisite: MAC 1105 or Instructor’s Approval.

**Required Course Materials:**

*Cengage Unlimited*

The materials required for this class—and any other classes using Cengage products—are included in ONE Cengage Unlimited subscription. For \$124.99 per semester, you get access to ALL your Cengage eTextbooks and online homework in ONE place. Four FREE hardcopy textbook rentals are also available for select titles, just pay \$7.99 S&H each.

Cengage Unlimited ISBN: 9780357700006.

This will include the textbook, homework assignments, quizzes and exams for the course and lab.

**IMPORTANT! Be sure to access Cengage via BrightSpace to register.** The bookstore manager can help you complete your subscription if you need help with payment.

Note: You only need to purchase one Cengage Unlimited subscription to add any Cengage eTextbook or online homework for other classes to your dashboard at no additional cost.

Download the free [Cengage Mobile App](#) to get your Cengage eTextbooks and study tools on your phone

(Beware of sites that are selling discounted Cengage Unlimited subscriptions. These sources are likely unauthorized sellers who have acquired access codes illegally, and transactions with such sources may pose a risk to your personal information.)

Note: Cengage Unlimited has a TWO WEEK grace period. If you have not purchased it by the second week of class, the resource will close until you purchase your subscription.  
Let me know if you have difficulty affording these course materials.

All students are required to purchase Labster in order to fulfill their laboratory requirement. You can do this by purchasing directly through the Bookstore or by purchasing directly from the company. Labster should be accessed only through BrightSpace.

#### **Instructional Methods:**

**Face to Face Section:** Lecture attendance is strongly recommended and **will be graded** based on participation in group work. There will be class participation activities each class period that will contribute to your overall grade.

**Face to Face Lab Session attendance is required** unless an involuntary situation prevents it. Students will be withdrawn from the lab after missing two consecutive weeks unless the instructor is 1) contacted by e-mail during the 2<sup>nd</sup> week of being absent, 2) the absence is excused and 3) arrangements are made to stay caught up.

**Online Section:** There will not be any live instruction via Zoom. There will be recorded lectures and topic videos made available. Zoom sessions to answer questions are available as needed and scheduled.

As stated above, you will enroll in Labster for your labs.

**Course Resources:**

Scientific calculator. TI-30 calculators are a good example. There are other kinds. They should be inexpensive (less than \$10) and they do a fine job. They are available in the book store and other retail locations. Spiral notebook for documenting your lab experiments.

Brightspace, lab computers, software and equipment.

**Course Requirements: Assessments (Exams/Quizzes/Assignments):**

No exams will be dropped. Exams will be given in Cengage. If you miss an exam, you will be able to take it during retakes later in the term. For each exam, no information will be released except your score until everyone has taken the exam.

If you want to retake an exam to try for a higher score, retakes will be made available during Final Exam Week. Your retake score will replace your original score if it is higher. If your original score is higher, you will keep that.

**Grading:****Grading Evaluation/Criteria**

Grading percentages for different assignments or exams may vary somewhat for each faculty teaching the course.

A weighted grading scheme is used for this course. This is different from a “points” grading scheme. Grade categories are weighted as follows:

Exams (5)	40%
Final Exam	15%
Homework	15%
Lab Grade	25%
Class Participation	5%

Keep track of your grades in BrightSpace, not Cengage.

**Grading Scale:**

89.5-100%	A
79.5-89.4%	B
69.5-79.4%	C
59.5-69.4%	D
0-59.4%	F