

## General Chemistry I CHEM 2045

The instructor reserves the right to make changes or corrections to this syllabus at any time. Students will be notified when any changes are made via e-mail.

### Course Overview

#### Description

CHM 2045 and CHM 2045L constitute the first semester of the two term sequence of General Chemistry, CHM 2045/2045L - 2046/2046L. Prerequisite information and credit suitability can be found in the Undergraduate Catalog. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

**COURSE OBJECTIVES:** As both a general education requirement and major's course, CHM2045 serves to teach: the scientific method, skills for problem solving, general chemistry knowledge, and a connection to the principles that govern the natural world.

#### INSTRUCTOR:

<b>DR. MARTINA SUMNER</b> Flint #254. E-mail (for administrative purposes): m.sumner@chem.ufl.edu	<b>Office Hours (Flint #254):</b> MWF 8:25 to 10:30 am (periods 2 and 3) and 3 to 5 pm (periods 8 and 9)
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#### REQUIRED MATERIALS:

Modified MasteringChemistry/LearningCatalytics for online homework, in-class clicker questions, and in-class quizzes.

Any College Chemistry Textbook (such as Silberberg or Tro) for course material

**GRADES:** Grades for the term will be determined as follows:

3 Progress Exams	600 pts
Final Cumulative Exam	250 pts
Quizzes	50 pts
Online Homework	50 pts
Clickers/Worksheets	50 pts
TOTAL	1000 pts

The following grade cutoffs will be used (these are non-negotiable):

900-1000 = A	830-859 = B+	730-759 = C+	660-699 = D+	< 600 = E
860-899 = A-	800-829 = B	700-729 = C	630-659 = D	
	760-799 = B-		600-629 = D-	

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

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

**QUIZZES:** Five percent of the course grade (50 points) will be based on weekly quizzes taken in class using Clickers. 3 to 5 questions worth a total of 5 points (we will have at least 10 quizzes – if we have more than 10 the best 10 will count towards your grade). You must work individually on these questions. You can earn up to 50 points toward your grade by taking these quizzes.

**ONLINE HOMEWORK:** Five percent of the course grade (50 points) will be based on online homework assignments through the MasteringChemistry website. Each assignment has a displayed deadline for earning full credit, typically due the day after each class. Assignments that are late can be completed for half credit. You can earn up to 50 points toward your grade by completing these assignments.

**CLICKERS AND WORKSHEETS:** Five percent of the course grade (50 points) will be based on performance on in-class clicker questions and in-discussion worksheets. You can earn points in class by correctly answering clicker questions through LearningCatalytics and your *percentage of correct answers will determine your points*. (So if you correctly answered 70% of the clicker questions, you will get  $0.7 \times 50 = 35$  points towards your final grade). You can also earn points by completing worksheets in the discussion sections (1½ points per worksheet). You can earn up to 50 points through these combined scores. Students may only receive clicker points for one session each day; any students who violate this policy or are caught cheating will lose all points for that day.

**DISCUSSION CLASSES:** The Discussion Classes meet every week and your attendance is expected. Your discussion sections will contain weekly worksheets that will count toward your overall grade. Each of these worksheets is worth 1½ points. You must go to your assigned discussion section to receive credit for the worksheet. If you are more than 5 minutes late, then you will not receive credit.

**CONTACTING THE INSTRUCTOR / OFFICE HOURS:** Emails are for administrative purposes only, and not for distance-instruction. All academic inquiries must be made during office hours or before/after lectures (if time permits). If this is not possible, visit the CLC (see below). Please be prepared before coming to office hours, bring specific questions and your previous work.

**CHEMISTRY LEARNING CENTER (CLC):** There is free help to be had from graduate student teaching assistants in the CLC Monday through Friday in Flint Hall 257. Your discussion TA will have office hours in the CLC, but you may go there anytime any TA is assigned there to get help on questions pertaining to chemistry. A schedule of the TA schedules will be posted in the corridor outside the CLC and also online. Additionally, there is the teaching center located on the ground floor of Broward Hall, if you'd like to use that resource. Their web site is <http://www.teachingcenter.ufl.edu>.

**COURSE SCHEDULE** (the lecture schedule is tentative, but exam dates will not change)

Week	Dates	Topics (# of lectures)	Chapters
1	Aug 22 – 24	Introduction and Review (2)	Chap. 1–2
2	Aug 26 – Sep 2	Mass Relations and Stoichiometry (3-4)	Chap. 3
3	Sep 7 – 14	Aqueous Reactions (4)	Chap. 4
	<b>September 20<sup>th</sup></b> <b>(8:20–10:20pm)</b>	<b>Progress Exam 1</b>	<b>Chaps. 1–4</b>
4	Sep 16 – 23	Enthalpy & Calorimetry (3)	Chap. 6
5	Sep 26 – 28	Atomic Structure (2)	Chap. 7
6	Sep 30 – Oct 7	Electron Configuration and Periodic Trends (4)	Chap. 8
7	Oct 10 – 12	Chemical Bonding Models (2)	Chap. 9
	<b>October 17<sup>th</sup></b> <b>(8:20–10:20pm)</b>	<b>Progress Exam 2</b>	<b>Chaps. 1–4, 6–9</b>
8	Oct 19 – 21	Molecular Geometry (2)	Chap. 10
9	Oct 24 – 26	Covalent Bonding Theories (2)	Chap. 11
10	Oct 28 – Nov 2	Gases (3)	Chap. 5
11	Nov 4 – 9	Intermolecular Forces and Liquids and Solids (3-4)	Chap. 12
	<b>November 14<sup>th</sup></b> <b>(8:20–10:20pm)</b>	<b>Progress Exam 3</b>	<b>Chaps. 1–12</b>
12	Nov 18 – 21	Solutions (3-4)	Chap. 13
13	Nov 28 – Dec 7	Chemical Kinetics (4)	Chap. 16
	<b>December 10<sup>th</sup></b> <b>(5:30–7:30pm)</b>	<b>Final Exam</b>	<b>Cumulative</b>

**Holidays (no classes):** September 5<sup>th</sup>, October 14<sup>th</sup>, November 11<sup>th</sup>, November 23<sup>rd</sup> – 25<sup>th</sup>

**EXAMS:** Exams will be taken in the evenings outside of class and the Exam Room Assignments will be posted. You must use a non-graphing non-programmable scientific calculator on exams (with log, ln, root, and exponent (scientific notation) functions). Be

sure to also bring pencils, section number, and your UF ID card. No notes, papers, cell phones or other electronic devices can be in view during exams.

No makeup (“do over”) progress exams will be given for any reason. If you must be absent for an exam due to a documented and approved academic or UF athletic conflict, bring the documentation to your instructor at least *one week prior* to the scheduled exam and an early conflict exam will be scheduled for you. If you are absent for an exam due to an unpredicted documented medical reason, you must contact the instructor as soon as possible. More information regarding this policy can be found in the [General Chemistry Exam Absence Policy](#) document found on Canvas.

To alleviate the stress of potential issues that do not fall under officially-sanctioned absences, we've incorporated an “average/replace” policy (the lowest of the three progress exams will be replaced by the average of the three progress exams). This “average/replace” policy will help to minimize the impact of a single poor performance but it will not completely disappear.

Any and all exam grade disputes or Scantron confirmations must be performed within two weeks of the scheduled exam date. Bubbling errors will not be negotiated, and a 5 point penalty will be applied for failure to bubble in a form code, UFID, or not taking the exam in the assigned room.

**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/>.

**CLASS DEMEANOR:** In order to have an optimal learning environment, the classroom needs to be free of disruptions. Therefore, it is expected that students come to class on

time and leave only when class is concluded by the instructor, and that the class is not disrupted by student talking or cell phone noises.

**DISABILITIES:** 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 accommodation. The student is responsible for scheduling the exam dates with the DRC. Students with disabilities should follow this procedure as early as possible.

**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.