

## 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 an announcement on canvas.

### 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.

**LECTURE: MTRF Period 3 (11 to 12:05 pm) CLB 130**

### INSTRUCTORS:

<p style="text-align: center;"><b>May 14 through August 10</b> <b>Dr. Simon E. Lopez</b> Sisler #329 E-mail (for administrative purposes): <a href="mailto:simonlopez@chem.ufl.edu">simonlopez@chem.ufl.edu</a></p>
<p style="text-align: center;"><b>Office Hours (Sisler #329)</b> MTRF 12:30 - 1:45 pm</p>

### MATERIALS:

Tophat subscription for in class clicker questions (required).  
Silberberg 8<sup>th</sup> edition recommended (copies of the 8<sup>th</sup> ed and solution manual are available in the Marston Science library) + Other College level General Chemistry Books.

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

3 Progress Exams	60%
Final Cumulative Exam	25%
Aleks	2%
Online Homework (May 14 – August 10)	8%
Worksheets	2%
Top Hat in class questions	3%
<b>TOTAL</b>	<b>100%</b>

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

90-100% = A	86-89.9% = A-	83-85.9% = B+	80-82.9% = B	76-79.9% = B-
73-75.9% = C+	70-72.9% = C	66-69.9% = D+	63-65.9% = D	60-62.9% = D-
< 60.0% = E				

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

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

**POSTED GRADES:** Should a student wish to dispute any grade received in this class, the dispute must be in writing (via e-mail to [simonlopez@chem.ufl.edu](mailto:simonlopez@chem.ufl.edu)) and submitted to the instructor within one week of the grade being posted to canvas. After one week has passed from when the grade was posted and the student made aware of the posting of the grade(s) via an announcement on canvas, the instructor considers those grades final.

**ALEKS:** Two percent of the course grade will be based on completion of the Aleks prep course. The deadline for completion of the Aleks prep course is Tuesday, May 29. The following shows the points you can earn based on completion:

Aleks completion percentage	Percent of grade earned
0-69%	0%
70-79%	0.5%
80-89%	1.0%
90-98%	1.5%
99-100%	2.0%

### ONLINE HOMEWORK:

Eight percent of the course grade (8 %) will be based on online homework assignments through the Canvas website of CHM2045. Each assignment has a displayed deadline for earning full credit; assignments that are late can be completed for half credit (maximum 24h later, contact Dr. Lopez). Students that miss a homework deadline due to an excused absence can ask for an extension by contacting the instructor. You can earn up to 8 % toward your grade by completing these assignments.

### IN CLASS TOP HAT QUESTIOS:

After the Drop/Add period ends, lecture participation will be facilitated via the Top Hat student response system (<https://tophat.com/>). You will be emailed by Top Hat with instructions on how to register for usage of the system. You'll be able to use your smart phone or lap top or tablet or any other applicable device. No clickers required. Three percent of the course grade (3 %) will be based on performance on in-class Top Hat questions. You can earn points in class by correctly answering *Top Hat questions* (½ point per correct answer + ½ point per participation). No "make-up" Top-Hat options will be offered for any reason - no exceptions.

**DISCUSSION CLASSES + WORSHEETS:** The Discussion Classes meet every Wednesday and your attendance is expected (attendance will be checked by your TA). Your discussion section will contain **weekly worksheets** that will count toward your overall grade (2%). You must go to your assigned discussion section to receive credit for the worksheet. Form groups of 2 to 3 students and work on it together. Any grade discrepancy needs to be addressed within a week of posting grades to canvas.

**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 JHH (Hernandez Hall) 105. 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>.

**EXAMS:** Exams will be taken at night as indicated above. You will have 120 minutes for 20 questions. 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, 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. If you miss an exam (and weren't able to schedule an early conflict exam) and it is an excused absence, we can replace the 0 on that exam with what you make on the final, so if you make a 230/270 on the final we will replace the 0 with 170.37 points (only one 0 may be replaced with what you make on the final).

To alleviate the stress of potential issues that do not fall under officially-sanctioned absences, we have incorporated an "average/replace" policy (the lowest of the three exams will be replaced by the average of the three exams). If you already have a 0 and plan on replacing that 0 with what you make on the final, the average/replace will only average the 3 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 one week 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, and/or UFID.

**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.

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

Dates	Topics (# of lectures)	Chapters (Silberberg 8 <sup>th</sup> )*
May 14 - 15	Introduction and review (2)	Ch. 1-2
May 17 - 22	Mass relations and stoichiometry (4)	Ch. 3
May 24 – June 1	Aqueous reactions (5)	Ch. 4
<b>Monday June 4 (7-9 pm)</b>	<b>Exam 1</b>	<b>Ch 1-4</b>
June 4 - 7	Gases (3)	Ch. 5
June 8 - 14	Thermochemistry (3)	Ch. 6
June 15 - 19	Kinetics (3)	Ch. 16
June 21 - 22	Nature of light	Ch. 7
<b>Thursday June 21 (7-9 pm)</b>	<b>Exam 2</b>	<b>Ch. 5-6,16</b>
<b>June 25 - 29</b>	<b>Summer Break</b>	
July 2	Quantum mechanical model (1)	Ch. 7
July 3 - 8	Electron configurations and periodic trends (3)	Ch. 8
July 9 - 10	Chemical bonding models (2)	Ch. 9
July 12 - 17	Molecular geometry (4)	Ch. 10
July 19 - 20	Covalent bonding theories	Ch. 11
<b>Monday, July 23 (7-9 pm)</b>	<b>Exam 3</b>	<b>Ch. 7-11</b>
July 23 - 27	Intermolecular Forces, Liquids, and solids (4)	Ch 12
July 30 – August 3	Solutions (4)	Ch 13
<b>Wednesday, August 8</b>	<b>Final Exam</b>	<b>Ch 1-13 + 16</b>

\*The topics that will be covered from each chapter will be selective and announced in class.

**Holidays (no classes):** Monday, May 28, summer break: June 25 – 29, Wednesday, July 4

**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 few days before summer break and at the end of the semester. 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.