

CHM2046 – GENERAL CHEMISTRY II – SPRING 2020

INSTRUCTOR:

DR. MARTINA SUMNER Flint #250 E-mail (for administrative purposes): m.sumner@chem.ufl.edu	Office Hours (Flint #250): MWF 8:30 to 9:15 am, 10:30 to 11:00 am, 12:30 to 1:30 pm, 2:50 to 3:30 pm (Mondays to 3:45 pm)
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LECTURE: MWF (Periods 3, 5, 7) in CLB 130

PREREQUISITE: A grade of C or higher in CHM2045 and MAC1147 or equivalent.

<https://catalog.ufl.edu/UGRD/courses/chemistry/>

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

Dates	Topics (# of lectures)	Silberberg 8 th Chapters*
Jan 6, 8	Intro (syllabus) & Kinetics (2)	Chapter 16
Jan 10 - 22	Equilibrium (5)	Chapter 17
Jan 24 - 31	Organic Chemistry (4)	Chapter 15
Wednesday, Feb. 5	Exam 1	Cumulative (ch 15-17)
Feb 3 - 14	Acid-Base Equilibria (6)	Chapter 18
Feb 17 - 28	Ionic Equilibria (6)	Chapter 19
Feb 29 – March 7	Spring Break	
March 9 - 13	Thermodynamics (3)	Chapter 20
Monday, March 16	Exam 2	Cumulative (ch 18-20)
March 16 - 18	Thermodynamics (2)	Chapter 20
March 20 - April 3	Electrochemistry (7)	Chapter 21
April 10	Withdrawal Deadline	
April 6 - 10	Inorganic chemistry (3)	Chapter 23
Wednesday, April 15	Exam 3	Cumulative (ch 20-23)
April 13 - 20	Nuclear chemistry (4)	Chapter 24
April 22	Review of all chapters for final	
Saturday, April 25	Final Exam 10 to 12 (noon)	Cumulative (ch 15-24)

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

OFFICIAL UF HOLIDAYS (no classes): Monday, Jan. 20, Spring Break: February 29 – March 7

MATERIALS: Tophat subscription for in class clicker questions (required).

Silberberg 8th edition recommended (copies of the 8th ed and solution manual are available in the Marston Science library), the ebook will be available for less than \$50,

<https://www.bsd.ufl.edu/G1CO/IPay1f/start.aspx?TASK=INCLUDED>

DESCRIPTION: CHM 2046 and CHM 2046L constitute the second 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, CHM2046 serves to teach: the scientific method, skills for problem solving, general chemistry knowledge, and a connection to the principles that govern the natural world.

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

3 Progress Exams	60%
Final Cumulative Exam	25%
PLA (Pre-lecture assignment)/HW	5%
Progress Checks/Proficiency Quizzes	5%
Clickers/worksheets	5%
TOTAL	100%

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

92-100% = A	84-87.9% = B+	72-75.9% = C+	64-67.9% = D+	< 56 = E
88-91.9% = A-	80-83.9% = B	68-71.9% = C	60-63.9% = D	
	76-79.9% = B-		56-59.9% = 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>

POSTED GRADES: Should a student wish to dispute any grade received in this class, the dispute must be in writing (via e-mail to m.sumner@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 in class, the instructor considers those grades final.

PRE-LECTURE ASSIGNMENTS (PLA)/ HOMEWORK (HW): Five percent of the course grade will be based on performance on PLA/HW. The 6 lowest scores will be dropped from this category at the end of the semester.

PRE-LECTURE ASSIGNMENTS (PLA): You will be expected to complete pre-lecture assignments in preparation for each class day. These assignments will be posted on Canvas under the quizzes tab and will be due prior to class. You will have three attempts to successfully answer the pre-lecture assignments.

HOMEWORK (HW): There will be approximately 2 to 3 graded homework assignments per chapter. You will have three attempts to successfully answer the HW. More homework will be available but not graded (you may find the optional homework assignments under Practice Quizzes). The optional HW will help you understand and master the material. You are very highly encouraged to work the optional HW.

PROGRESS CHECKS/PROFICIENCY QUIZZES: Five percent of your grade will come from the progress checks and the proficiency quizzes. The proficiency quizzes will be administered via canvas. The progress checks may be administered by a variety of means such as canvas, tophat, or on paper during discussion class.

CLICKERS/WORKSHEETS: Five percent of the course grade will be based on in-class clicker questions administered through tophat and weekly discussion worksheets. TopHat will be worth 2.5% and worksheets will be worth 2.5%. For example, if you completed 12 worksheets out of 13 that would give you a 92.3% so 2.31% and if you received 85% of the TopHat points you will get $2.31 + 2.5 = 4.81\%$

CLICKERS (TOPHAT): You can earn points in class by correctly answering clicker questions through TopHat. Each class day will be worth an equal number of points. The points will be added together and divided by the total points possible and your TopHat grade adjusted as shown below.

% TopHat earned	0 – 19.9%	20 – 39.9%	40 – 59.9%	60 – 79.9%	80 – 100%
% of grade earned	0%	1.0%	1.5%	2.0%	2.5%

DISCUSSION CLASSES/ WORKSHEETS: The Discussion Classes meet every Thursday and your attendance is expected. Your discussion section will contain weekly worksheets that will count toward your overall grade. You must go to your assigned discussion section to receive credit for the worksheet. The worksheets will be posted on Canvas in advance and you are strongly encouraged to start working on it before you come to discussion. We suggest you work in groups of 2 or 3 to work those problems. **One time only** (no matter the reason), I will allow you to e-mail the completed worksheet to your TA (you have to cc me on that e-mail message). Any grade discrepancy needs to be addressed within a week of posting grades to canvas to your TA.

EXAMS: Exams will be taken in the evenings outside of class and the Exam Room Assignments will be posted to canvas. 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.

Exam Absences: will be handled in accordance with official UF academic regulations. For more information, see <https://catalog.ufl.edu/UGRD/academic-regulations/> . See below for further clarification for two different types of situations.

(1) Conflicts with other events: Acceptable reasons to miss a scheduled exam include conflicting evening exams in courses with higher course numbers, religious holidays, military obligations, special curricular requirements (e.g., attending professional conferences), or participation in

official UF-sanctioned activities such as athletic competitions, *etc.* For more information on such absences see the official UF Policy at <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#absencestext>). If you must be absent for an exam due to a documented and approved conflict known in advance, you must e-mail your instructor (m.sumner@chem.ufl.edu) the documentation at least *one week prior* to the scheduled exam and an **early conflict exam** will be scheduled for you.

(2) Missing an exam due to an emergency or sudden illness: If you are absent for an exam due to an unpredicted documented medical reason or family emergency, you must contact the instructor as soon as possible, and you may be asked to have your excuse verified by the Dean of Students Office (DSO). Your instructor will follow UF academic regulations in evaluating the notification and/or documentation received by you or by the DSO on your behalf. Once your instructor is satisfied with the validity of your exam absence a make-up exam will be scheduled after a reasonable amount of time, *i.e.*, before the end of the semester. If your documentation is deemed insufficient to excuse your absence you will receive a zero on the missed exam.

Exam Grade Disputes: 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. A 5-point penalty will be applied if your name comes back on the “no match” list from the scanning center (i.e. your UF-ID could not be found). A 5-point penalty will be applied if you took the exam in the incorrect room (i.e. if you took the exam in another instructor assigned room). A 20% penalty (or 40 points) will be applied if you fail to bubble in a form code.

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. Example: exam 1 140, exam 2 100, exam 3 180, so average replace 140, so the 100 will be replaced with 140. Another example: exam 1 140, exam 2 0 (missed), exam 3 180, so average of the three exams is 106.67 so the 0 will be replaced with the 106.67.

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>.

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://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>) 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 who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting disability.ufl.edu/students/get-started. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester (please e-mail me a copy of your letter through outlook not canvas e-mail). 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 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/>.

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 via announcements in class and on Canvas.