## CHM2046 - GENERAL CHEMISTRY II - Spring 2019

**INSTRUCTOR:** Dr. Martina Sumner, E-mail (for administrative purposes): <u>m.sumner@chem.ufl.edu</u>

Office Hours (Flint 250): MWF 8:20-9:20 am, 10:30-11:10 am, 12:50-1:40, 2:50-3:20 pm Tuesdays from 10:35 -11:35 am

**LECTURE:** MWF P3, P5, P7 CLB 130

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

Dates	Topics (# of lectures)	Silberberg 8 <sup>th</sup> Chapters*	
Jan 7, 9	Intro (syllabus) & Kinetics (2)	Chapter 16	
Jan 11-23	Equilibrium (5)	Chapter 17	
Jan 25, 28	Ionic Equilibria (K <sub>sp</sub> ) (2)	Chapter 19.3	
Tuesday, Jan. 29	Exam 1	cumulative	
Jan 30, Feb 1-11	Acid-Base Equilibria (6)	Chapter 18	
Feb 13-18	Ionic Equilibria (3)	Chapter 19	
Feb 20-25	Inorganic chemistry (3)	Chapter 23	
Feb. 27	review		
Wednesday, Feb. 27	Exam 2	cumulative	
March 4 - 8	Spring Break		
March 1 - 18	Thermodynamics (5)	Chapter 20	
March 20-29; April 1-3	Electrochemistry (7)	Chapter 21	
Thursday, April 4	Exam 3	cumulative	
April 5, 8, 10, 12	Nuclear chemistry (3-4)	Chapter 24	
April 12	Withdrawal Deadline		
April 12, 15, 17, 19	Organic chemistry (3-4) Chapter 15		
April 22	review		
Monday, April 22	Exam 4	cumulative	
April 24	Review of all chapters for final		
Saturday, April 27	Final Exam 5:30 to 7:30 pm	cumulative	

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

Holidays (no classes): Monday, Jan. 21, Spring Break: March 4 – 8

**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)

**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.

4 Progress Exams	60%
Final Cumulative Exam	25%
Quizzes	9%
Clickers/PLA/worksheets	6%
TOTAL	100%

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

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

**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 on canvas, the instructor considers those grades final.

**QUIZZES:** Nine percent of the course grade will be based on weekly quizzes typically administered on Tuesdays at the end of the discussion class (quizzes will be 12 min long). Quizzes will be based on the assigned end of chapter problems (EOCs). You must work individually on the quiz during class. You will also have a chance to do 8 quizzes throughout the semester on canvas (part of an ongoing study). The two lowest scoring quizzes will be dropped before calculating your final grade.

**CLICKERS/PLA/WORKSHEETS**: Six percent of the course grade will be based on in-class clicker questions (using Top Hat), weekly worksheets (in discussion), and daily pre-lecture

assignments (on Canvas). Each of these assignments will be worth three points. The 10 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 five attempts to successfully answer the pre-lecture assignments.

**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. You can only receive credit for participating in the clicker questions from your registered period.

**DISCUSSION CLASSES/ WORKSHEETS:** The Discussion Classes meet every Tuesday 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 may start working on it before you come to discussion. Any grade discrepancy needs to be addressed within a week of posting grades to canvas to your TA. At the end of each discussion class, a 2 question quiz will be administered (12 min to complete the quiz).

**EXAMS:** Exams will be administered at night from 8:20 to 9:50 pm. You must use a nongraphing non-programmable scientific calculator on exams (with log, In, 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. You will need to present documentation regarding the absence to the instructor. More information regarding this policy can be found in the <u>General Chemistry Exam Absence Policy</u> found on Canvas.

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 four exams will be replaced by the average of the four exams). If you had an excused absence for one of the progress exams, then the average/replace will only average the 3 exams that were taken. 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 30 point penalty will be applied for failure to bubble in a form code, 10 points deducted if your name shows up on the no match list (make sure you bubble in your UF-ID correctly).

**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 <u>free help</u> 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 <u>http://www.teachingcenter.ufl.edu</u>.

**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 (<u>https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx</u>) 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** (<u>http://elearning.ufl.edu</u>): 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 <u>http://helpdesk.ufl.edu/</u>.

**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, <u>http://www.dso.ufl.edu/drc/</u>) 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 <u>umatter@ufl.edu</u> 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 <a href="https://evaluations.ufl.edu">https://evaluations.ufl.edu</a>. Evaluations are typically open during the last week of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <a href="https://evaluations.ufl.edu/results/">https://evaluations.ufl.edu/results/</a>.

**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 <u>General Education Program Requirements</u> 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.