# General Chemistry II CHEM 2046

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 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

PRE-REQUISITE: Grade of C or higher in CHM2045

**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.

LECTURE: MTWF Period 5 (2 to 3:05 pm) Carlton 0100

## **INSTRUCTOR:**

DR. MARTINA SUMNER	Office Hours (Flint #254):
Flint #254.	MTWF 12:30 - 1:45 pm (in Flint #254) and in
E-mail (for administrative purposes): m.sumner@chem.ufl.edu	Carlton after class

## **REQUIRED MATERIALS:**

McGraw and Hill (Connect), Silberberg 7<sup>th</sup> edition for online homework and ebook, log in with your username and password from last semester. For those of you who didn't have this last semester, click on the following link: <a href="https://connect.mheducation.com/class/m-summer-c-mtwf-car100">https://connect.mheducation.com/class/m-summer-c-mtwf-car100</a> and purchase a one semester access code.

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

5 Progress Exams	60%
Final Cumulative Exam	25%
Quizzes	5%
Online pre-lecture assignments	5%
Clickers/Worksheets	5%
TOTAL	100%

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

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

76-79.9% = B-

Information on current UF grading policies for assigning grade points can be found at: <a href="https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx">https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx</a>

**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:** Five percent of the course grade will be based on weekly quizzes administered via canvas (5 to 10 questions - 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 will get 2 attempts at each quiz.

**ONLINE PRE-LECTURE ASSIGNMENTS:** Five percent of the course grade will be based on online pre-lecture homework (10 points each) through the Connect (McGraw Hill website). Each assignment is due by 1:30 pm the day of class (MTWF). Extra practice homework will also be available through Connect but it won't be worth any points.

**CLICKERS AND WORKSHEETS**: Five percent of the course grade will be based on performance on in-class clicker questions (using top hat) and in-discussion worksheets. You can earn points in class by correctly answering clicker questions through TopHat 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 x 30 = 21 points towards your final grade). You can also earn points by completing worksheets (about 11 worksheets per semester) in the discussion sections (2 points per worksheet). You can earn up to 50 points through these combined scores.

DISCUSSION CLASSES: 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 worksheet will be posted to canvas Wednesday afternoon (the day before discussion). You may start working on it before you come to discussion. 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. If you missed a discussion section and show your completed worksheet to your TA the following week you will receive half credit. Any worksheet that is later than a week is worth no points.

**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 Flint Hall 257. Your discussion TA will have office hours in the CLC, but you may go there any time 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 <a href="http://www.teachingcenter.ufl.edu">http://www.teachingcenter.ufl.edu</a>.

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

Week	Dates	Topics (# of lectures)	Chapters (Silberberg 7 <sup>th</sup> )*
1	May 8 -12	Kinetics (3), equilibrium (1)	Ch. 16, ch 17
2	May 15 - 19	Equilibrium (4)	Ch. 17
	Monday May 22 in class	Exam 1	
3	May 23 -26	Acid-Base Eq (3)	Ch. 18
4	May 30 – June 2	Acid-Base Eq (2), Ionic Eq (1)	Ch 18, Ch. 19
	Monday June 5 in class	Exam 2	
5	June 6 - 9	Ionic Eq. (3)	Ch. 19
6	June 12 - 16	Thermodynamics (3)	Ch. 20
	Friday, June 16 in class	Exam 3	
7	June 19 - 23	Summer Break	
8	June 26 – 30	Thermodynamics (2), electro (2)	Ch 20, ch 21
9	July 3 - 7	Electrochemistry (3)	Ch 21
	Monday July 10 in class	Exam 4	
10	July 11 - 14	Electrochemisty (2), nuclear chem (1)	Ch 21
11	Nuclear chemistry (2), Transition uly 17 - 21 Elements and their coordination compounds (2)		Ch 24, 23
	Monday July 24 in class	Exam 5	
12	July 25 - 28	Transition Elements and etc (2), organic compounds and the atomic properties of carbon (1)	Ch 23, 15
13	July 31 – August 1	Organic compounds and etc (2)	Ch 15
	Tuesday August 1	Comprehensive FINAL	7 to 9 pm

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

Holidays (no classes): Monday, May 29, summer break: June 19 – 23, Tuesday, July 4

#### **VIDEOS OF LECTURES:**

Videos of lecture can be found here: got to canvas and click on link
All of the recordings in this recurring schedule will be located in a catalog found at
https://mediasite.video.ufl.edu/Mediasite/Catalog/Full/53224adb44e243ca9b90a7e38db2445f21

**EXAMS:** Exams will be taken Monday during lecture. You will have 75 minutes. We will have one Friday exam on June 16 just before summer break. 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, I can replace the 0 on that exam with what you make on the final, so if you make a 230/270 on the final I 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, I have incorporated an "average/replace" policy (the lowest of the five exams will be replaced by the average of the five 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 4 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 (<a href="https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx">https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx</a>) 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** (<a href="http://elearning.ufl.edu">http://elearning.ufl.edu</a>): 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, <a href="http://www.dso.ufl.edu/drc/">http://www.dso.ufl.edu/drc/</a>) 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 <a href="mailto:umatter@ufl.edu">umatter@ufl.edu</a> 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 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 <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.