

University of Florida
CHM 2046 General Chemistry 2
Spring 2019; Course Schedule

Instructor: Dr. Simon E. Lopez, 329 Sisler Hall (Office).

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E-Learning (Canvas): <https://lss.at.ufl.edu/> (will be updated regularly).

Classes: M,W,R (period 8).

Location: LEI-104, Leigh Hall (LEI).

Office Hours: M (10:00 – 11:30 a.m.), T (12:45 – 2:45 p.m.), and R (12:45 – 2:45 p.m.) *in 329 Sisler Hall.*

Week	Dates	Topics (# of Lectures)	Chapters*
Jan 7 th	Jan 7,9,10	Review of Chemical Kinetics; Reaction Rates; Activation Energy; Reaction Mechanisms; Catalysts (3)	Ch. 16
Jan 14 th Jan 21 st	Jan 14,16,17,23,24	Gas-phase and Heterogeneous Equilibria; Le-Chatelier's Principle; Reaction yield: Optimization (5)	Ch. 17
Jan 29th (Tuesday): Progress Exam 1 (8:20-10:20 pm); Cumulative Ch. 16-17			
Jan 28 th	Jan 28, 30,31	Brønsted-Lowry acid-base potential and equilibria (2) Acid-Base Titrations and Buffers (1)	Ch. 18.1-18.8 Ch. 19.1
Feb 4 th	Feb 4,6,7	Acid-Base Titrations and Buffers (3)	Ch. 19.1-19.2
Feb 11 th	Feb 11,13	Lewis Acid-Base (Electrophile-Nucleophile, reactions and mechanisms (2)	Ch. 18.9
Feb 18 th	Feb 14 th + Feb 18,20,21 + Feb 25	Solubility Equilibria, selective precipitation; Complex ions and Amphoteric Hydroxides (5)	Ch. 19.3-19.4
Feb 27th (Wednesday): Progress Exam 2 (8:20-10:20 pm); Cumulative Ch. 16-19.4			
March 11 th	Feb 28+ March 11,13,14,18	Equilibrium Thermodynamics (5)	Ch. 20
March 18 th	March 20,21,25, 27,28, Apr 1 st	Oxidation/Reduction Potential: Redox Reactions; Electrochemistry and Equilibria; Voltaic & Electrolytic Cells (6)	Ch. 21
April 4th (Thursday): Progress Exam 3 (8:20-10:20 pm); Cumulative Ch. 16-21			
April 1 st	April 3,4, + Apr 8 th	Transition Metals (3)	Ch. 23
Apr 8 th	Apr 10,11 + Apr 15 th	Introduction to Nuclear Chemistry (3)	Ch. 24
Apr 15 th	Apr 17,18	Introduction to Organic Chemistry (2)	Ch. 15
April 22nd (Monday): Progress Exam 4 (8:20-10:20 pm); Cumulative Ch. 16-21+23,24,15			
April 27th (Saturday): Final Exam (5:30-7:30 pm); Cumulative Ch. 15-21+23,24			
Holidays (no classes): January 21st (Dr. Martin Luther King Jr. Day); March 2nd-9th (Spring Break)			

COURSE INFO:

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>

REQUIRED MATERIALS:

Top Hat (<https://tophat.com>) for in-class questions.

Any College Chemistry Textbook (such as Silberberg or Tro; Top-Hat offers also an online book) for course material.

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: 4 Progress Exams 600 pts, Final Cumulative Exam 250 pts, Online Homework (Canvas) 100 pts, Top-Hat (in-class) questions 30 pts, Worksheets 20 pts, TOTAL 1000 pts.

The following grade cutoffs will be used (these are non-negotiable): 920-1000 = A 880-919 = A- 840-879 = B+ 800-839 = B 760-799 = B- 720-759 = C+ 680-719 = C 640-679 = D+ 600-639 = D 560-599 = D- < 560 = 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>

ONLINE HOMEWORK:

Ten percent of the course grade (100 points) will be based on online homework assignments through the Canvas website of CHM2046. Each assignment has a displayed deadline for earning full credit; assignments that are late can be completed for half credit (maximum 24 h later). 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 100 points 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 (30 points) will be based on performance on in-class Top Hat questions. You can earn points in class by correctly answering Top Hat questions (0.75 point per correct answer + 0.75 point per participation). No "make-up" TopHat options will be offered for any reason - no exceptions.

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. Questions about grades will not be discussed during office hours due to privacy regulations.

CHEMISTRY LEARNING CENTER (CLC):

There is free help to be had from graduate student teaching assistants in the CLC Monday through Friday in Joseph Hernandez Hall 105 (JHH-105). You may go to the CLC anytime and 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 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, UF-ID.

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 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.