**Daniel A. Savin** LEI 318 Phone: 392-9150 <u>savin@chem.ufl.edu</u> Office hours: Room TBA; Monday, 3:00 – 4:15, Thurs. 11:45 – 1:00 and by appointment.

Daniel R. Talham CLB 412 Phone: 392-9016 <u>talham@chem.ufl.edu\*</u>
Office hours (tentative): CLB 412, Mon. 2:00-3:00, Wed. 4:00-5:00, and Friday 2:00-3:00, and by appointment.

**Objective:** To introduce general chemistry concepts and problem solving skills and their relationship to advanced topics in science and engineering.

## Textbook:

• Recommended text: Chemistry: The Molecular Nature of Matter and Change (8<sup>th</sup> edition), by Martin Silberberg and Patricia Amateis, McGraw Hill. Note: UF All Access provides an ebook option. <a href="https://www.bsd.ufl.edu/G1CO/IPay1f/start.aspx?TASK=INCLUDED">https://www.bsd.ufl.edu/G1CO/IPay1f/start.aspx?TASK=INCLUDED</a> or via Canvas.

Alternatives: Any other edition of the Silberberg book.

Any comprehensive General Chemistry textbook.

**e-Learning:** We will use the Canvas e-learning site (<a href="http://elearning.ufl.edu">http://elearning.ufl.edu</a>) to provide other class materials, convey announcements and track grades.

**Chemistry Learning Center (CLC):** Hernandez Hall 105. Tutoring (free) from graduate student TAs is available in the CLC Monday-Friday, normally continuously from periods 2-9. In addition, TAs assigned to this class section will hold office hours in the CLC. Office hours will be posted the first week of classes.

## Topics and associated textbook chapters: Approximate Dates:

Equilibrium	Chapter 17	Aug. 22 - Aug. 29
Acid-Base Equilibria	Chapter 18	Sept. 5 – Sept. 12
Buffers and Acid-Base Titration	Chapter 19	Sept. 14 – Sept. 19
Equilibria of Ionic Solids and Complex Ions	Chapter 19	Sept. 21 – Sept. 26
Thermodynamics	Chapter 20	Sept. 28 – Oct. 10
Electrochemistry	Chapter 21	Oct. 12 – Oct. 26
Main Group Elements	Chapters 14, 22	Oct. 29 – Nov. 14
Transition Metals	Chapters 22, 23	Nov. 16 – Nov. 28
Organic Chemistry	Chapter 15	Nov. 30 – Dec. 5

<sup>\*</sup>Email. Please note, email should only be used for administrative issues and will not be used for academic instruction or distance learning. Academic inquiries should be handled in person, typically in office hours, immediately before or after lecture, or with scheduled appointments.

**Suggested Readings and Homework:** Detailed agendas, including topics to be covered, suggested reading, and suggested practice questions and problems will be provided approximately every two weeks. These agendas will also announce the range of material to be included on each quiz and test. Answers to the homework problems will be posted on the Canvas site. Homework will not be graded, but quizzes and some questions on tests will closely follow assigned homework questions. Working on homework with a partner or in groups is strongly encouraged.

**Discussion Sections.** Discussion sections will begin August 28. These discussion periods will be used for team worksheets, which earn points toward your course grade. Discussion sections also provide opportunity for questions and clarifications on homework problems, reading, and lecture content.

## **Tests and Quizzes:**

Progress Test 1. Friday, September 21, Evening Exam, TBA
Progress Test 2. Monday October 15, Evening Exam, TBA
Progress Test 3. Monday November 19, Evening Exam, TBA

Quizzes on Homework. Friday, September 7, in class

Friday, October 5, in class

Monday, November 5, in class Tuesday discussion sections

Worksheets. Tuesday discussion sections

Final Exam (cumulative). Tuesday December 11, 3-5 pm, TBA

Scientific calculators are required for all quizzes and exams, but only non-graphing, non-programmable calculators will be permitted. 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 and quizzes.

**Grading:** The final grade will be based on a total of 1000 points. The following anticipated grade cut-offs will not be raised: A(850), A-(820), B+(780), B(750), B-(720), C+(680), C(650), C-(620), D+(580), D(550), E(<550)

Progress Tests 500 points (two best scores plus ½ of lowest score)

Quizzes 150 points (3 x 50 points)

Worksheets 50 points (50 maximum out of possible 60)

Final Exam 300 points

Total 1000 possible points

Attendance: CHM-2046 follows the *General Chemistry Exam Absence Policy*, posted on CANVAS. Briefly, attendance is required for all quizzes and tests. No makeup quizzes or exams will be given. Documented, anticipated absences for a scheduled UF academic or athletic conflict should be brought to the instructor at least one week prior to the scheduled exam or quiz and an early conflict exam or quiz will be arranged. Unpredicted absences, such as a medically related absence, should be documented and brought to the instructor as soon as possible. Grades in these circumstances are explained in the *General Chemistry Exam Absence Policy*. In all cases, absences, to be considered, must be consistent with university policies, found in the online catalog: <a href="https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx">https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx</a>

**Academic Honesty:** 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

(http://www.dso.ufl.edu/sccr/process/student-conduct-bonor-code/) specifies a number of behaviors that

(http://www.dso.ufl.edu/sccr/process/student-conduct-honor-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.

Accommodations for students with disabilities: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, 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. Students with disabilities should follow this procedure as early as possible in the semester.

## UF grading policies for assigning grade points:

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

**UF Course Evaluation Process:** Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online 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 <a href="https://evaluations.ufl.edu/results/">https://evaluations.ufl.edu/results/</a>.

**General Education Credit:** This course is available for general education credit. This course introduces students to fundamental concepts of chemistry including bonding, atomic and molecular structure, chemical reactions, states of matter, reaction rates, chemical thermodynamics and equilibria. The scientific method and the place of chemistry in the everyday world are emphasized. **General Education Student Learning Outcomes** are detailed, in the *General Education Program Requirements* document posted on CANVAS.