



Course Syllabus
General Chemistry II: CHM 174

Faculty Name:	
Course Information:	GENERAL CHEMISTRY II: CHM 174
Course Section, Term and Year:	
Course Meeting Times & Location:	

Contact:

Phone Number:	
Office Location:	
Email address:	
Enter days/time you are available to meet with students.	

Netiquette

Respect the diversity of opinions among the instructor and classmates and engage with them in a courteous, respectful, and professional manner. All posts and classroom communication must be conducted in accordance with the student code of conduct. Think before you push the Send button. Did you say just what you meant? How will the person on the other end interpret the words?

Communication:

Faculty Communication with Students:

Discuss how faculty will contact students.

Student Communication with Faculty:

Discuss how students will contact faculty when they have questions or concerns.

Course Description:

CHM 174 General Chemistry II

3-3-4

A continuation of CHM 173, stressing concepts designed for students pursuing mathematics, physics, chemistry, engineering, and pre-med studies. Topics covered include kinetics, equilibrium, thermodynamics, acids and bases, solubility, electrochemistry, and descriptive chemistry. *Prerequisites: High School Algebra, MAT 040, CHM 173, or permission of Instructor. General Education: N.*

Course Learning Outcomes:

Students will:

1. Manipulate equations and analyze data in chemical processes.
2. Generate rate laws and determine reaction orders.
3. Explain equilibrium shifts using Le Châtelier's Principle.
4. Use models to name, draw and/or identify structures of organic molecules.
5. Write balanced nuclear equations for nuclear transmutations.
6. Design and critique laboratory procedures.
7. Develop explanations for experimental results by interpreting data.

General Education Learning Outcomes:

Natural Sciences (and Scientific Reasoning) (N):

Students will demonstrate scientific reasoning applied to the natural world, including

- an understanding of the methods scientists use to explore natural phenomena, including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of data analysis or mathematical modeling; and
- application of scientific data, concepts, and models in one of the natural sciences.

Program Learning Outcomes:

Program Learning Outcomes – Liberal Arts and Science: Science (AS) (Outcomes relative to course are shaded.)

Students will:

- A. Utilize scientific methods to explore natural phenomena.
- B. Apply critical thinking and/or problem solving in the context of a scientific discipline.
- C. Demonstrate the safe and proper use of scientific instrumentation, measuring devices, chemical reagents, media, and/or tools of science in a laboratory or field setting relevant to a specific scientific discipline.
- D. Utilize effective communication in one of the scientific disciplines.

E. Choose appropriate scientific knowledge to evaluate current issues in a scientific discipline.

Program Learning Outcomes – Health Sciences (AS) (Outcomes relative to course are shaded.)

Students will:

- Demonstrate the safe and proper use of scientific instrumentation, measuring devices, chemical reagents, media, and/or tools of science in a laboratory setting.
- Demonstrate communication, problem solving and critical thinking skills pertinent in the healthcare sector.
- Understand and utilize scientific method.
- Promote health and wellness among members of the college and/or local communities through service learning.

Course Resources:

Textbook:	Enter title, edition, author, ISBN for required text.
Materials:	Enter all additional required materials and tools needed to complete course here.
Access:	List access codes needed for websites or other software. .

Course Policies:

Click here to describe how students will participate in your class. Include policies regarding missed exams, makeup exams, extra credit assignments, late assignments, missed assignments, etc.

Course Delivery:

Course Content:

Describe how students will access course materials (handouts, Brightspace, textbook,...). Keep Accessibility in mind as you determine how students will access the materials.

Lecture Format:

Traditional, On Campus format.

Student Expectations specific to this course:

Describe what you expect students to do as it relates to your course, how students will be expected to participate in your course, how students should submit assignments, exams, quizzes, or any additional assignments (presentations, projects,...) in person or in Brightspace.

Course Outline and Schedule

Grading Method:

Click here to enter a clear explanation of how students will be evaluated, including a description of course assessments and a statement of the assessment process and measurements. Include weight/percentages for quizzes, exams, papers, projects, homework, attendance, participation, etc.

Grading Scale:

Letter	Grade Range
A	Enter range for A.
A-	Enter range for A-.
B+	Enter range for B+
B	Enter range for B.
B-	Enter range for B-
C+	Enter range for C+.
C	Enter range for C.
D	Enter range for D.
F	Enter range for F.