CHEM 202 Syllabus

Course Code	Course Name	Credits	Prerequisite(S)	Classification
CHEM 202	General Chemistry	4 (3T+ 3P)	CHEM 110, CHEM 281	Department Requirement

Course Description	Thermo chemistry, gases, liquids, solutions, chemical kinetics, oxidation-reduction reactions, chemical thermodynamics, electrochemistry, nuclear chemistry, environmental effects.
Class Scheduling	Classes are held 2 times/week each for 80 minutes. Labs are held 1 time/week for 150 minutes.
Textbook(s)	General Chemistry, Raymond Chang,11th edition Chemistry, Mortimer, 6th ed., 1986, Wadsworth Inc . Chemistry, Steven S. Zumdahl, 6th ed., Houghton Mifflin College Div.
Course Coordinator	Dr. Layla Alharbi Dr. Qana Alsulami Dr. Soad Alsheheri Dr. Zoya Zaheer Dr. Amell Alsudiri

Assessment tools:

Week Due	Assessment
6	Exam 1
9	Exam 2
11	Quiz
13	Final exam

Relationship to SOs

1	2	3	4	5	6
X	X				X

CLOs

By the end of this course student will be able to:

CLO1. Define the thermodynamic and physical properties of solutions.

CLO2. State redox, nuclear, and kinetic reactions

CLO3. Demonstrate how to solve different type of problems by using mathematical skills and the required knowledge.

CLO4. Analyze different chemical reaction by identify their types and apply the concepts.

CLO5. Perform experiment and handle chemicals, glassware and instruments and contribute to teamwork.

Contents

List of Topics	No. of Weeks
Thermochemistry	3
Introduction to Thermodynamics	3
Physical Properties of Solutions	3
Chemical Kinetics	2
Electrochemistry	3
Nuclear Chemistry	1
Total	15
Laboratory Section: Introduction Laboratory Safety, Density, Buffer solution, heat capacity of calorimeter, Conduct metric titration, Conductimetric Method, molal freezing point depression, Solubility of Salt, Hydrolysis of Ethyl Acetate, Zero Order of Reaction	13