

Academic Year 2022 Summer Course Syllabus-General Chemistry C

(7/31-9/1; 5 weeks)

1. Course Meeting Time: M Tu W Th F 234 (9:10 am-12:10 pm)
2. Classroom: TBA
3. Instructor: Prof. Chi-Kai Lin
4. Course grade is based on average of four exams.
5. Textbook : S. S. Zumdahl, D. J. DeCoste, Chemical Principles, 8th edition, 2017, CENGAGE Learning: USA.

Syllabus			
Week	Date	Topic	
1	7/31-8/4	1 Chemists and Chemistry 2 Atoms, Molecules, and Ions 3 Stoichiometry 4 Types of Chemical Reactions and Solution Stoichiometry 5 Gases 6 Chemical Equilibrium 7 Acids and Bases	
2	8/7	1 st Midterm exam	
2	8/8-8/11	8 Applications of Aqueous Equilibria 9 Energy, Enthalpy, and Thermochemistry 10 Spontaneity, Entropy, and Free Energy	
3	8/14	11 Electrochemistry	
3	8/15	2 nd midterm exam	
3	8/16-8/18	12 Quantum Mechanics and Atomic Theory 13 Bonding: General Concepts 14 Covalent Bonding: Orbitals	
4	8/21-8/22	15 Chemical Kinetics	
4	8/23	3 rd midterm exam	
4	8/24-8/25	16 Liquids and Solids 17 Properties of Solutions	
5	8/28-8/30	18 The Representative Elements 19 Transition Metals and Coordination Chemistry 20 The Nucleus: A chemist's View 21 Organic and Biochemical Molecules	
5	8/31	Final exam	