

## ESG 198: Fundamentals of Engineering Chemistry

Textbook: Chemistry 9<sup>th</sup> edition by S. S. Zumdahl and S. A. Zumdahl

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**Office hours: 3-4 PM on Tuesday and Thursday**

Week	Date	Chapter	Topics
1	2018/2/27	1, 2	Overview (Chemical Foundation, Atoms and Molecules)
	2018/3/1	holiday	
2	2018/3/6	3	Stoichiometry
	2018/3/8	4	Types of Chemical Reactions
3	2018/3/13	5	Gases
	2018/3/15	5	Gases
4	2018/3/20	6	First law of thermodynamics
	2018/3/22	6	Thermochemistry, Enthalpy, First law of thermodynamics
5	2018/3/27	6	Thermochemistry, Enthalpy, First law of thermodynamics
	2018/3/29	17	Spontaneity, Entropy, Second law of thermodynamics
6	2018/4/3	17	Free energy, Second law of thermodynamics
	2018/4/5	17	Free energy, Second law of thermodynamics
7	2018/4/10	13	Chemical Equilibrium
	2018/4/12	13	Chemical Equilibrium
8	2018/4/17	14	Acids and Bases
	2018/4/19	Midterm exam	
9	2018/4/24	15	Acid-Base Equilibria
	2018/4/26	18	Electrochemistry
10	2018/5/1	18	Electrochemistry
	2018/5/3	18	Electrochemistry
11	2018/5/8	12	Chemical Kinetics
	2018/5/10	12	Chemical Kinetics
12	2018/5/15	7	Atomic Structure and Periodicity
	2018/5/17	7	Atomic Structure and Periodicity
13	2018/5/22	holiday	
	2018/5/24	8	Chemical Bonding: General Concepts
14	2018/5/29	8	Chemical Bonding: General Concepts
	2018/5/31	9	Covalent Bonding, Molecular Orbitals
15	2018/6/5	9	Covalent Bonding, Molecular Orbitals
	2018/6/7	10	Liquids and Solids
16	2018/6/12	10	Liquids and Solids
	2018/6/14	11	Properties of Solutions
17	2018/6/19	Final exam	