

Chemistry for Engineers - Class Schedule – Fall 2023

(Subject to Change –See website for updates)

Date	Reading/Class Discussion	Text Problems (odd problems assumed)
Aug 21	1.3 – 1.4	17, 19, 35 – 47,
Aug 23	1.5, 2.2 – 2.5	Ch 1: 51 – 63, 69 – Ch2: 11,13,17,19,23,27,31,43 - 49
Aug 28	2.6 – 2.7	57, 59, 61 – 67
Aug 30	3.1 – 3.3	11 – 21, 25 – 29 , 33
Sep 2	3.4 – 3.5	39 – 53, 59 – 67
Sep 4	Labor Day	
Sep 6	3.5	106, 112
Sep 8	Review and Practice	
Sep 11	Exam 1 – Chapters 1 – 3	
Sep 13	4.2 – 4.5	9 – 19, 25 – 33, 39, 53, 55
Sep 18	Practice	
Sep 20	5.2 – 5.6	11 – 15, 19, 23 – 31, 37 – 41, 49 – 59, 67, 69
Sep 25	6.1 – 6.5	13 – 17, 27, 29, 35, 37, 41, 49, 55, 59 - 67
Sep 27	6.5 – 6.7	
Oct 2	Review and Practice	
Oct 4	Exam 2 – Chapters 4 - 6	
Oct 9	7.2 – 7.5	17 – 21, 27, 33, 35,37 – 41, 49, 65 – 69
Oct 11	7.8, 8.1 – 8.3	11, 15, 17, 21 – 31
Oct 16	Crystals	HW Handout
Oct 18	Metallic Bonding and Semiconductors	37, 41 – 51, 88, 91
Oct 23	Alloys and Phase Changes	
Oct 25	8.4 – 8.5	
Oct 30	9.2 – 9.4	
Nov 1	9.5 – 9.6	11, 15 – 19, 23, 31 – 37,47 – 55, 59 – 63
Nov 6	Exam 3 – Chapters 7 – 8	9, 11, 19
Nov 8	10.2 – 10.3	25, 29 – 37
Nov 13	10.4 – 10.5	51 – 61, 84, 86, 100
Nov 15	10.6 – 10.7	5 – 9, 19 – 25, 33 – 37, 41 – 45
Nov 20	Exam 4 – Chapters 9 – 10	
Nov 22	Thanksgiving Break	
Nov 27	12.2 – 12.3	13 – 21, 27, 29 – 35, 41 – 45
Nov 29	12.4 – 12.5	
Dec 4	12.6 – 12.7	61, 65, 69 – 73
Dec 6	Exam 5 – Chapters 12 – 13	
Dec ?	Final Exam	

Chemistry for Engineers - Laboratory Schedule

Week of..	Laboratory	Lecture Subjects Completed
Aug 21	Check In – Measurement and Significant Figures	Units, Atomic Theory, Gas Laws
Aug 28	Physical Properties of Chemicals	Material Properties, Alloys
Sep 4	Types of Chemical Reactions	Atoms, Molecules, Stoichiometry
Sep 11	Hydrates	Lewis Dots, Bonding
Sep 18	Spectrophotometric Analysis of Permanganate	Intermolecular Forces, Reaction Energy
Sep 25	Alka-Seltzer: An Application of Gas Laws	Atomic Theory
Oct 2	Cold Packs and Hot Packs	Bonding and Molecular Geometry
Oct 9	Mid-Term, Written	Non-Metallic Bonding
Oct 16	Synthetic Polymers	Crystal Structure, Metallic Bonding
Oct 23	Fuels Project - Density, Viscosity	Spontaneity, Equilibrium
Oct 30	Fuels Project - Calorimetry	Aqueous Equilibrium
Nov 6	Fuels Project - Vapor Pressure and Heat of Vaporization	Thermodynamics - Free Energy, Equilibrium
Nov 13	Experiment 9 – Antacid Analysis – Acid-Base Titration	
Nov 27	KHT Solubility Equilibrium	Kinetics
Dec 4	Final Exam – Written	