

CH301 COURSE OUTLINE

Lecture Number	Day	Date	Topic	Worksheet	Quizzes and Exams
	H	8/26	Syllabus, course overview	Worksheet 1	
1	T	8/31	Wave Particle Duality of Light		
2	H	9/2	Development of Quantum Mechanics	Worksheet 2	
3	T	9/7	The Origin of Atomic Orbitals		
4	H	9/9	Electronic Configurations of Atoms and Ions	Worksheet 3	Quiz 1
5	T	9/14	Periodic Trends Explained by ENC		
6	H	9/16	Filled and Half Filled Shell Stability	Worksheet 4	
7	T	9/21	The Chemical Bond: Ionic Bonds		Quiz 2
8	H	9/23	Covalent Lewis Dot Structures	Worksheet 5	
9	T	9/28	More Sophisticated Ideas in Structures		
	W	9/29	Exam 1		Exam 1 on Lectures 1-9
10	H	9/30	Turning 2D into 3D VSEPR Models	Worksheet 6	
11	T	10/5	VB and VSEPR Theory		
12	H	10/7	VB Theory: Making MOs from AOs	Worksheet 7	
13	T	10/12	Molecular Orbital Theory		Quiz 3
14	H	10/14	Ideal Gas Law	Worksheet 8	
15	T	10/19	Advanced Ideas in Gas Theory		
16	H	10/21	Intermolecular Forces	Worksheet 9	Quiz 4
17	T	10/26	Theory Behind IMF		
	W	10/27	Exam 2		Exam 2 on Lectures 10-17
18	H	10/28	Getting Ready for Thermodynamics	Worksheet 10	
19	T	11/2	Qualitative Thermodynamics		
20	H	11/4	Quantitative Thermodynamics	Worksheet 11	
21	T	11/9	Statistical Thermodynamics		
22	H	11/11	Internal Energy	Worksheet 12	Quiz 5
23	T	11/16	Internal Energy		
23	H	11/18	Entropy	Worksheet 13	
24	T	11/23	Entropy and Pie and Ice Cream	Worksheet 14	Quiz 6
25	T	11/30	Free Energy and Thermo Wrap Up		
	W	12/1	Exam 3		Exam 3 on Lectures 18-25
	H	12/9	Final Exam 2 to 5 pm		Lectures 1-25