

			<b>FCH 361 Spring 2020</b>						
			Reading assignments from the <b>8th Edition of</b>						
			Atkins and de Paula						
<b>Monday</b>				<b>Wednesday</b>				<b>Friday</b>	
1/13	INTRODUCTION	1/15	22.2-4	1/17	21.5	1/15	22.2-4	1/17	21.5
			Basics of Rate Laws		Basics of Rate Laws, Arrhenius				
	NO CLASS	1/22	22.6-7	1/24	22.2.d, 22.7	1/22	22.6-7	1/24	22.2.d, 22.7
			Elementary Reactions		Pseudo-First Order and Steady State				
1/27	Pseudo-First Order and Steady State	1/29	<b>Homework #1</b> 24.5	1/31	24.1-2	1/29	<b>Homework #1</b> 24.5	1/31	24.1-2
			Arrhenius and Thermodynamics		Collision Theory & Diffusion Control		Arrhenius and Thermodynamics		Collision Theory & Diffusion Control
2/3	<b>Homework #2</b>	2/5	<b>EXAM I</b>	2/7	8.1-2	2/3	<b>Homework #2</b>	2/7	8.1-2
	REVIEW				Failures of Classical Mechanics		REVIEW		Failures of Classical Mechanics
2/10	8.3-5	2/12	8.6-7	2/14	9.1	2/10	8.3-5	2/14	9.1
	The Wavefunction and Probability		The Wavefunction and Probability		Basics of Particle in a Box		The Wavefunction and Probability		Basics of Particle in a Box
2/17	<b>Homework #3</b> 8.5-7, 9.2	2/19		2/21	9.4-5	2/17	<b>Homework #3</b> 8.5-7, 9.2	2/21	9.4-5
	Meaning of Particle in a Box		Meaning of Particle in a Box		Basics of Simple Harmonic Oscillator (SHO)		Meaning of Particle in a Box		Basics of Simple Harmonic Oscillator (SHO)
2/24	13.9-11	2/26		2/28	<b>Homework #4</b>	2/24	13.9-11	2/28	<b>Homework #4</b>
	Meaning of SHO		Meaning of SHO		REVIEW		Meaning of SHO		REVIEW
3/2	<b>EXAM II</b>	3/4	9.3	3/6	9.3 13.2b, 13.9-11, 13.13	3/2	<b>EXAM II</b>	3/6	9.3 13.2b, 13.9-11, 13.13
			Classical versus Quantum Mechanics		Tunneling, Selection Rules				Tunneling, Selection Rules
3/9	13.2c	3/11	13.14-16	3/13	<b>Homework #5</b> 12.4-6	3/9	13.2c	3/13	<b>Homework #5</b> 12.4-6
	Origin of selection rules for SHO and 1-D box		Vibrations of Polyatomic Molecules		Basics of Rotational Spectra		Origin of selection rules for SHO and 1-D box		Basics of Rotational Spectra
<b>Enjoy</b>			<b>Spring</b>			<b>Break!</b>			
3/23	13.12	3/25	11.3	3/27	11.4	3/23	13.12	3/27	11.4
	Rotational Transitions		Molecular Orbital (MO) Theory: H <sub>2</sub> <sup>+</sup>		MOs for Homonuclear Diatomics		Rotational Transitions		MOs for Homonuclear Diatomics
3/30		4/1	<b>Homework #6</b>	4/3	<b>EXAM III</b>	3/30		4/3	<b>EXAM III</b>
	MOs for Homonuclear Diatomics		<b>REVIEW</b>				MOs for Homonuclear Diatomics		
4/6	11.5	4/8		4/10	14.1c-d, 14.2-5	4/6	11.5	4/10	14.1c-d, 14.2-5
	Heteronuclear Diatomics		MOs from quantum calculations		Electronic Spectroscopy		Heteronuclear Diatomics		Electronic Spectroscopy
4/13	<b>Homework #7</b> 16.1-2	4/15	17.1-2	4/17	17.3	4/13	<b>Homework #7</b> 16.1-2	4/17	17.3
	Statistical Mechanics - Prob. & populations		Statistical Mechanics for molecules		Statistical Mechanics - some theory		Statistical Mechanics - Prob. & populations		Statistical Mechanics - some theory
4/20	24.4-5	4/22		4/24	<b>Homework #8</b>	4/20	24.4-5	4/24	<b>Homework #8</b>
	Transition State Theory		Transition State Theory		<b>REVIEW</b>		Transition State Theory		<b>REVIEW</b>
4/27	<b>EXAM IV</b>					4/27	<b>EXAM IV</b>		
			(tentative) Thursday 4/30			<b>FINAL EXAM</b> 3:00 - 5:00 p.m.			