

Syllabus		Phys 335	Fall 2024	
Aug.	26	Welcome and Introduction; Thermal Equilibrium	Ch. 1.1	
	28	Ideal Gas; Equipartition	Ch. 1.2–3	
	30	Heat and Work	Ch. 1:4–5	
Sept.	2	Heat Capacity	Ch. 1:6	
	4	Enthalpy; HW #1	Ch. 1:6	
	6	Microstates	Ch. 2.1–2	
	9	Interacting Systems, 2nd Law	Ch. 2.3	
	11	Large Systems ; HW #2	Ch. 2.4	
	13	Ideal Gas	Ch. 2.5	
	16	Entropy	Ch. 2.6	
	18	Temperature; HW #3	Ch. 3.1	
	20	Entropy and Heat	Ch. 3.2	
	23	Paramagnetism	Ch. 3.3	
25	Equilibrium and Pressure; HW #4	Ch. 3.4		
27	Chemical Potential	Ch. 3.5–6		
30	<i>Problems and Review</i>		Chs. 1–3	
Oct.	2	Hour Test I	Chs. 1–3	
	4	Heat Engines	Ch. 4.1	
	7	Refrigerators	Ch. 4.2	
	9	Free Energy; HW #5	Ch. 5.1	
	11	Free Energy and Equilibrium	Ch. 5.2	
	14	<i>Fall Break</i>		
	16	Phase Transformations	Ch. 5.3	
	18	Phase Transformations of Mixtures; HW #6	Ch. 5.4	
	21	Boltzmann Factor	Ch. 6.1	
	23	Average Values; HW #7	Ch. 6.2	
25	Equipartition	Ch. 6.3		
28	Maxwell Speed Distribution	Ch. 6.4		
30	Partition Functions; HW #8	Ch. 6.5		
Nov.	1	Partition Functions	Ch. 6.6	
	4	Ideal Gas	Ch. 6.7	
	6	<i>Problems and Review</i>		Chs. 4–6
	8	Hour Test II	Chs. 4–6	
	11	Gibbs Factor	Ch. 7.1	
	13	Bosons and Fermions	Ch. 7.2	
	15	Degenerate Fermi Gas; HW #9	Ch. 7.3	
	18	Blackbody Radiation	Ch. 7.4	
	20	<i>Presentations</i>		
	22	<i>Presentations</i>		
25	<i>Presentations</i>			
27–29	<i>Thanksgiving</i>			
Dec.	2	<i>Presentations</i>		
	4	Ising Model	Ch. 8.2	
	6	Ising Model (<i>continued</i>); HW #10		
<i>Final Exam (cumulative)</i>				