

Thermal Physics, Spring 2020, Revised Schedule

	Monday	Wednesday	Friday
January	6 Thermal Equilibrium Section 1.1	8 Ideal Gas, Equipartition 1.2, 1.3	10 Heat and Work 1.4, 1.5
	13 Heat Capacities 1.6 PS1	15 Enthalpy finish 1.6	17 Microstates and Multiplicities 2.1, 2.2
	20 M. L. King Day	22 The Second Law 2.3 PS2	24 Large Systems 2.4
	27 Ideal Gas 2.5	29 Entropy 2.6	31 Temperature 3.1 PS3
February	3 Review Session and Test (chapters 1 and 2)	5 Entropy and Heat 3.2	7 Paramagnetism 3.3
	10 Pressure 3.4 PS4	12 Chemical Potential 3.5, 3.6	14 Heat Engines 4.1
	17 Presidents Day	19 Refrigerators 4.2, browse 4.3-4.4	21 Free Energy 5.1 PS5
	24 More about Free Energy 5.2	26 Phase Transformations 5.3	28 Clausius-Clapeyron Relation 5.3
March	2	4 Spring Break	6
	9 The Boltzmann Factor 6.1 PS6	11 Review Session and Test (chapters 3, 4, 5)	13 Emergency shutdown
	16 Emergency shutdown	18 Average Values 6.2	20 The Equipartition Theorem 6.3
	23 The Maxwell Speed Distribution 6.4 PS7	25 More about Partition Functions 6.5, 6.6	27 Ideal Gas Revisited 6.7
	30 The Gibbs Factor 7.1	1 Bosons and Fermions 7.2 PS8	3 Degenerate Fermi Gases 7.3, to page 277
April	6 Photon Gas 7.4	8 Blackbody Radiation finish 7.4	10 Debye Theory of Solids 7.5 PS9
	13 Review Session	15 Test (chapters 6, 7)	17 Work on projects
	20 Work on projects	22 Final Projects Due	24