

# Thermal Physics, Spring 2020

	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 <b>PS1</b>	15 Enthalpy finish 1.6	17 Microstates and Multiplicities 2.1, 2.2
	20 M. L. King Day	22 The Second Law 2.3 <b>PS2</b>	24 Large Systems 2.4
	27 Ideal Gas 2.5	29 Entropy 2.6	31 Temperature 3.1 <b>PS3</b>
February	3 <b>Review Session and Test</b> (chapters 1 and 2)	5 Entropy and Heat 3.2	7 Paramagnetism 3.3
	10 Pressure 3.4 <b>PS4</b>	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 <b>PS5</b>
	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 <b>PS6</b>	11 <b>Review Session and Test</b> (chapters 3, 4, 5)	13 Average Values 6.2
	16 The Equipartition Theorem 6.3	18 The Maxwell Speed Distribution 6.4 <b>PS7</b>	20 More about Partition Functions 6.5, 6.6
	23 Ideal Gas Revisited 6.7	25 The Gibbs Factor 7.1	27 Bosons and Fermions 7.2 <b>PS8</b>
April	30 Degenerate Fermi Gases 7.3, to page 277	1 Photon Gas 7.4	3 Blackbody Radiation finish 7.4
	6 Debye Theory of Solids 7.5 <b>PS9</b>	8 <b>Review Session and Test</b> (chapters 6 and 7)	10 Additional Topics work on projects
	13 Additional Topics work on projects	15 Additional Topics work on projects	17 Final Project Presentations
	20 Final Project Presentations	22 Final Project Presentations 11:00 am - 12:50 pm	24