Week	Monday	Wednesday	Friday
1. Aug 20-24	1 state variables pp 1-4	2 ideal gas laws; pp13-24	3 kinetic theory of gases I; pp 25-28
2. Aug 27-31	4 kinetic theory of gases II, pp29-30	5 real gases pp 31-39	6 First Law pp 45-51
3. Sept. 3-7	Labor Day	7 Applications of the first law; pp 51-55	8 Energy and Heat Capacity pp 55-57
4. Sept. 10-14	9 Enthalpy pp 57-62	10 Adiabatic processes pp 62-65	11 Thermochemistry pp 65-73
5. Sept. 17-21	12 Perfect differentials, pp 81-84, 905-906	No lecture	13, 14 Thermodynamic calculations pp 84-92
6. Sept. 24-28	15 Introd. to the Second Law, pp 96-99	16 Entropy pp 99-102	First Hour Exam
7. Oct. 1-5	17 Calculating the entropy. Pp 106-112	No lecture	18,19 The Second Law: examples and formulations
8. Oct. 8-12	20 Consequences of the Second Law	No lecture	21 Thermodynamic Engines pp 103-104
9. Oct. 15-19	22 Microscopic Basis of the 2nd and 3rd Laws	23 Thermodynamic Potentials pp 113-119	24 Thermodynamic calculations, continued. pp 125-132
10. Oct. 22-26	25 Fugacity pp 133-136	26 Phase transitions. pp 143-145	27 Topography of a phase transition. pp 145-152
11. Oct. 29-Nov 2	28 Numerical examples of phase transitions	29. Physical source of the phase transition	30 Surface tension and capillary action pp 152-158
12. Nov. 5-9	31 Partial molar quantities and liquid mixtures. , pp 163-166.	32 Application of the Euler and Gibbs-Duhem equations to solutions, pp 166-169	Second Hour Exam
13. Nov. 12-16	33 Chemical Potential of Liquids, pp 171-176	34 Equilibrium between liquid solutions and the gas phase, pp 177-186.	35 Entropy and Energy of Mixing 169-171
14. Nov. 19-23	36 The phase rule, pp 191-198	37 Construction of the Temperature Composition Diagram pp 199-208	Thanksgiving
15. Nov. 26-30	38 Equilibrium constants I, pp 215-221	39 Equilibrium constants II pp 222-227	40 Equilibrium of electrolytes pp229-235, 248-253.

Final Exam: Tuesday, Dec. 4, 1-3 pm