

Chemistry 541: Chemical Thermodynamics (Spring 2008)

Time and Place: MW 6:00-7:15 pm, FW201
Text: *Molecular Thermodynamics*, by Donald A. McQuarrie and John Simon
Instructor: Chong Zheng, Office FW 326, Phone: 753-6871, e-mail: zheng@cz.chem.niu.edu

Date	Tentative Topics	Reading
Jan. 14, 16	No classes, read Chapter 1	Ch. 1
Jan. 23	Energy Levels of Atoms and Molecules	Ch. 1
Jan. 28, 30	Energy Levels of Atoms and Molecules	Ch. 1
Feb. 4, 6	Properties of Gases	Ch. 2
Feb. 11, 13	Properties of Gases	Ch. 2
Feb. 25, 27	Boltzmann Factor and Partition Functions	Ch. 3
March 3, 5	Partition Functions and Ideal Gases	Ch. 4

First Mid Term Exam: Wednesday, March 5

Spring break: March 9-16

March 17, 19	First Law of Thermodynamics	Ch. 5
March 24, 26	Entropy and Second Law of Thermodynamics	Ch. 6
March 31, April 2	Entropy and Third Law of Thermodynamics	Ch. 7
April 7, 9	Helmholtz and Gibbs Energies	Ch. 8

Second Mid Term Exam: Monday, April 14

April 16	Phase Equilibria	Ch. 9
April 21, 23	Liquid-Liquid Solutions	Ch. 10
April 28, 30	Solid-Liquid Solutions	Ch. 11
May 5, 7	Chemical Equilibrium	Ch. 12

Final Exam: 6:00-7:50 pm, Monday, May 12

Grading:	Weekly homework problems:	30%
	Two Mid term exams	40%
	Final exam:	30%

A:	100-90 average points based on the homework problems and exams
B:	89-80
C:	79-70
D:	69-60
F:	< 60