Syllabus

Thermodynamics and Statistical Mechanics (3760), spring 2006

Instructor:
Eugene Mishchenko, Room 313 JFB, Phone: 581-7115, E-mail: mishch@physics.utah.edu
Office hours: Mon, 5:15-6:15 pm, Fri 5pm-6pm, or by appointment
Secretary: Jackie Hadley, JFB 201D, Phone: 581-6861, E-mail: jackie@physics.utah.edu
Textbooks:

Grading:
Homeworks (11): 10 points each, 110 points total
Midterm tests (3): 30 points each, 90 points total
Final test: 120 points

Homeworks are due on Fri 11:50am every week [no homeworks for the week immediately after a midterm]. Exceptions: medical emergencies, imprisonment, etc. only if well documented.

Midterms (tentative):
Wed Feb 1 or Feb 8
Wed Mar 8
Fri Apr 7 or Mon Apr 10
No make-up tests.

Contents (tentative):
Introduction (1 class)
Equation of State (4 classes)
The First Law (4 classes)
Consequences of the First Law (3 classes)
Entropy and Second Law (4 classes)
Combined First and Second Law (5 classes)
Thermodynamic Potentials (4 classes)
Applications of Thermodynamics (4 classes)
Kinetic Theory (4 lectures)
Statistical Thermodynamics (6 classes)

Final test: May 2, 10:30am-12:30pm.

Final test is mandatory for passing this course.