PHYS 451: College Physics II   **Syllabus**   **Spring 2018**

Instructor:	Hongbo Joshua Yang Office: REIC 110; E-mail: hyang20@alaska.edu
Time:	Lectures: Mondays, Wednesdays, 3:30 pm - 4:30 pm
Place:	REIC 204
Office Hours:	Mondays, Wednesdays @ REIC 110, 10:15 pm - 11:15 pm, or by appointment.
Credits:	2 credits, 2 hours/week of lecture
Required Text Book:	**An Introduction to Thermal Physics** by D. V. Schroeder, Pearson/Addison-Wesley, 2000 (ISBN 0-201-38027-7)
Course Description	The canonical ensemble, maximizing entropy, the partition function and Helmholtz free energy, the harmonic oscillator, Einstein and Debye solids, classical systems and the ideal gas, diatomic molecules, equipartition theorem, the photon gas and the blackbody spectrum, the grand canonical ensemble, quantum statistics, Fermion and Boson systems.

Grading Policy:

Homework	40%
Midterm 2	20%
<u>Final</u>	<u>40%</u>
Total	100%

The final grading for this course will be based on a curve, the average of which is usually taken to be the break-point of letter grade B- and C+, and the standard deviation of the grade point distribution will separate subsequent letter grades.

Homework:
On the average, problems will be assigned each week on Wednesdays. The homework will be due by the following Wednesday 3:30 PM. **All homework assignments must be turned in directly to me in class**. **No emailed or otherwise electronically-submitted assignments will be accepted**. Late assignments will be generally marked down as follows: late up to 1 day minus 10%, late up to 7 days minus 10% per one day late, after 7 days late minus 100%. The exceptions will be assignments due on April 25 that will **NOT** be accepted late.

Exams:
An hour-long midterm exam will be given on March 5, 2018 during the regular lecture time. The exam will be closed-book, but you will be given most of the needed equations. The exam will be graded and handed back as soon as possible. The final exam will be at 3:15-5:15 pm, Friday, May 4, 2017. It will cover the entire course, with some emphasis on the more recent material. The final will be closed-book, but you will be given most of the needed equations.

Student Code of Conduct:
You are expected to submit work that is your own and properly acknowledge the work of others. You are responsible for understanding and adhering to the **Student Code of Conduct** that is printed in the UAF Course Catalog. Abide by It. Violations of the Code will be reported to the Dean of Students.

Disabilities Services:
If applicable, it is your responsibility to arrange for these services. The UAF Center for Health and Counseling provides services for UAF students with disabilities to ensure equal access to educational opportunities. The Center's Disability Services Program ensures compliance with §504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. If you believe you are eligible for 504 and/or ADA accommodations, please contact them at 474-7043 (WHIT 203).

Week	Date	Lecture Subject	Homework
		Tentative Weekly Schedule	
	W Jan 17	Syllabus/Intro	
2	M Jan 22	6.1	
	W Jan 24	6.1	
3	M Jan 29	6.2	
	W Jan 31	6.2	
4	M Feb 5	6.3	
	W Feb 7	6.4	
5	M Feb 12	6.5	
	W Feb 14	6.6	
	F Feb 16	6.7	
6	M Feb 19	6.7	
	W Feb 21	7.1	
7	M Feb 26	7.2	
	W Feb 28	Review	
8	M Mar 5	**Mid-term Exam**	
	W Mar 7	7.3	
9	M Mar 12		
	W Mar 14	**Spring Break (no classes)**	
	F Mar 16		
10	M Mar 19	7.3	
	W Mar 21	7.4	
11	M Mar 26	7.4	
	W Mar 28	7.5	
12	M Apr 2	7.5	
	W Apr 4	7.6	
13	M Apr 9	7.6	
	W Apr 11	8.1	
14	M Apr 16	8.1	
	W Apr 18	8.2	
15	M Apr 23	8.2	
	W Apr 25	Review	
16	M Apr 30	Review	
	F May 4	**??, Final Exam**	