

Syllabus for PHYS 5D: Thermodynamics (course #19073 Fall 2008)

Schedule: Tuesdays	2:00 - 3:45 PM	@ Thimann Lecture Hall 003
Instructor: Keivan Esfarjani,	ISB 236	keivan@physics.ucsc.edu
	Phone: 9-3430	http://physics.ucsc.edu/~keivan
Office Hours: Thursdays	2:00-4:00 PM	
Textbook: “Physics for Scientists & Engineers”	4 th Edition (2008)	by D. C. Giancoli.
Recommended text: “Feynman Lectures”	Vol 1.	by Richard P. Feynman

Evaluations will be based on students’ performance in the following tasks:

Seven best homeworks	28%
Two 1/2 hour quizzes	22%
Final Exam	50%

- * The homework assignments will be online (login to your account in masteringphysics.com and check your assignments)
- * Three unhand-in homework problems = FAIL.
- * Each quiz will contain at least one problem closely related to a homework problem.
- * Quizzes and exams are closed-book, the needed formulas (cheat sheet) will be provided, and only simple calculators¹ are allowed during the tests.
- * Reading assignments must be done before the lecture, as the lecture will not cover all the topics discussed in the textbook. Your reading assignment consists in reading the textbook and preparing yourself for the lecture according to the following schedule.

Outline of the course: it will tentatively follow this schedule

Chapter	Section title	Date	
17	Basic Concepts	Sept 30	
17	Ideal Gas, Thermal Expansion	Oct 7	
18	Kinetic Theory	Oct 14	
18	Real Gases	Oct 21	
19	Heat & Calorimetry	Oct 28	
19	Internal Energy, First Law	Nov 4	quiz1
19	Heat Transfer	Nov 18	
20	Heat Engines	Nov 25	
20	Second Law & Entropy	Dec 2	quiz2
Last class	Review	To be decided	
17-20	Final	Dec 11	

¹Simple means one can not store text or formulas in its memory, and it is not programmable