

PHYS309 COURSE SYLLABUS

FALL, 2015

INSTRUCTOR: Dr. Muruges Duraisamy

OFFICE: Lewis 226
OFFICE HOURS: 10.00-11.00am TH (by appointment)
OFFICE PHONE: 915-5622
E-MAIL ADDRESS: duraism@phy.olemiss.edu

COURSE PAGE: <http://www.phy.olemiss.edu/~duraism/phys309.html>
CLASS HOURS: 4:00 pm - 5:15 pm TH, F Lewis Room 228

Course Description:

In this course we will study , ideal gasses, thermodynamics, and the statistical processes which give rise to thermodynamic behavior.

The Text:

The required text book is An Introduction to Thermal Physics Ed. By Daniel V. Schroeder

Grading Plan:

Coursework will be weighted as follows:

Weekly Homework (10 Sets)	30 %
Exam 1	20 %
Exam 2	20 %
Final Exam	30%

Grading Type:

The numerical grade (out of 100) will be converted to a letter grade according to the UM +/-grading system found at <http://www.olemiss.edu/info/grading.html>

Grades	Numerical points	GPA
A	> (or =) 90	4.0
A-	[87,89]	3.7
B+	[84,86]	3.3

B	[80,83]	3.0
B-	[75,79]	2.7
C+	[71,74]	2.3
C	[65,70]	2.0
C-	[60,64]	1.7
D	[56,59]	1
F	< 55	0

TENTATIVE CLASS SCHEDULE: This is a tentative syllabus and a slight adjustments might be made.

Week	Date	Day	Chapter/Topic	Reading Assignment
1	Jan 22	TH	Introduction, CH 1	1.1 -1.2
	Jan 23	F	CH1: Energy in Thermal Physics	1.2-1.4
	Jan 29	TH	CH1: Energy in Thermal Physics	1.4.-1.6
	Jan 30	F	CH2: The Second Law	2.1-2.3
3	Feb 05	TH	CH2: The Second Law	2.3-2.4
	Feb 06	F	CH2: The Second Law	2.5-2.6
4	Feb 12	TH	CH3: Interactions and Implications	3.1-3.2
	Feb 13	F	CH3: Interactions and Implications	3.3-3.5
5	Feb 19	TH	EXAM 1 (CH1 to CH2)	
	Feb 20	F	CH4:Engines and Refrigerators	4.1-4.2
6	Feb 26	TH	CH5:Free Energy and Chemical Thermodynamics	5.1-5.2
	Feb 27	F	CH5:Free Energy and Chemical Thermodynamics	5.2-5.3
7	Mar 05	TH	CH5:Free Energy and Chemical Thermodynamics	5.4
	Mar 06	F	CH5:Free Energy and Chemical Thermodynamics	5.5
8	Mar 19	TH	EXAM 2 (CH3 to CH5)	
	Mar 20	F	CH6: Boltzman Statistics	6.1

9	Mar 26	TH	CH6: Boltzman Statistics	6.2
	Mar 27	F	CH6: Boltzman Statistics	6.3
10	Apr 02	TH	CH6: Boltzman Statistics	6.4
	Apr 03	F	CH6: Boltzman Statistics	6.5
11	Apr 09	TH	CH6: Boltzman Statistics	6.5-6.6
	Apr 10	F	CH6: Boltzman Statistics	6.7
12	Apr 16	TH	CH7: Quantum Statistics	7.1
13	Apr 17	F	CH7: Quantum Statistics	7.2
	Apr 23	TH	CH7: Quantum Statistics	7.3
	Apr 24	F	CH7: Quantum Statistics	7.4
15	Apr 30	TH	CH7: Quantum Statistics	7.4
	May 01	F	CH7: Quantum Statistics	7.5
15	May 06	W	Final Exam : 8.00 am -10.30 am	

Academic Integrity Statement:

As an Olemiss student I have abided by the UM academic integrity policy as described in Policy Code ACA.AR.600.001 <https://secure4.olemiss.edu/umpolicyopen/ShowDetails.jsp?istatPara=1&policyObjidPara=10817696> and <http://conflictresolution.olemiss.edu/m-book/>

Attendance Policy:

All students are required to be present for all class meetings.

Students With Disabilities:

If you have a disability requiring an accommodation, please contact the Office of Student Disability Services (SDS) at 234 Martindale Center (sds@olemiss.edu) phone: 662-915-7128