

PHYS 346 - Schedule (Subject to Change) - January 3, 2012

Week	Date	Lec#	Ch#	Topics	Notes
1	06-Jan	1	1	Introduction, definitions, units, review of energy	
2	09-Jan	2	1	Sources of energy, power, electrical energy	
	11-Jan	3	2	Past consumption, exponential growth	
	13-Jan	4	2	Lifetime of fossil fuels	
3	16-Jan	5	3	Hubbert Model	
	18-Jan	6	3	Hubbert Model Example, Summary of Fossil Fuels	
	20-Jan	7	4	Thermodynamics	Assignment 1 due - Ch 1, 2
4	23-Jan	8	4	Heat engines	
	25-Jan	9	4	Heat pumps	
	27-Jan	10	5	Environmental effects of fossil fuels	Assignment 2 due
5	30-Jan	11	5	Environmental effects of fossil fuels	
	01-Feb	12		Electromagnetic radiation - blackbody radiation	
	03-Feb	13	6	Electromagnetic radiation - greenhouse effect	Assignment 3 due
6	06-Feb	14	6	Electricity - review (charge, potential, field)	
	08-Feb	15	7	Electricity - review (circuits, power)	
	10-Feb	16	7	Midterm I - Ch 1-4	No assignment
	13-Feb			Reading Break	
7	20-Feb	17	7	Electricity - batteries	First scrapbook entry due
	22-Feb	18	8	Magnetism and AC electricity	
	24-Feb	19	8	Magnetism and AC electricity	Assignment 4 due
8	27-Feb	20	9	Commercial electricity	
	29-Feb	21	9	Commercial electricity	
	02-Mar	22	10	Nuclear Physics	Assignment 5 due
9	05-Mar	23	10	Radioactivity, Fission	
	07-Mar	24	11	Nuclear Energy I	
	09-Mar	25	11	Nuclear Energy I	Assignment 6 due
10	12-Mar	26		Health and Environmental Impacts of Nuclear Energy	
	14-Mar	27	12	Environmental Impacts	
	16-Mar	28	12/13	Midterm II - Ch 5-10	no assignment
11	19-Mar	29	13	Nuclear energy resources/health and environment	
	21-Mar	30	14	Health issues/ Start renewable energy	
	23-Mar	31	14	Renewable energy Wind, Wave, Tidal	Assignment 7 due
12	26-Mar	32	15	Renewable energy Solar	
	28-Mar	33		Renewable energy solar, biomass	
	30-Mar	34		Energy transfer (heating, cooling...)	Assignment 8 due
13	02-Apr	35		Energy conservation	
	04-Apr	35		Transportation	
	06-Apr		16	Easter Friday	holiday
	09-Apr		16	Easter Monday	holiday
14	11-Apr		16	Last day of classes: Summary	Assignment 9, Scrapbook Entries Due 12:00pm
	19-Apr			Final Exam - all material	Room TBD