

Physics 100
Fall 2009
MWF 1330-1420 in PSB 217

Text: Physics Concepts and Connections, 4th ed. by Art Hobson
** optional electronic version at <http://www.safarix.com/0131569902> **

copy of printed text on reserve in Sinclair Library Wong AV Center ##
ask for Call Number: PC #197

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no	week		text sections
class	starting		
	24 Aug.	Overview, fundamentals	1.1-1.2, 1.6;
		+ 1st half of Galileo DVD	2.2, 2.4-2.5; 4.2, 4.4
	31 Aug.	Galileo & how objects move	1.4-1.7, 2.6, Chap. 3
		+ 2nd half of Galileo DVD	
M	7 Sept.	Newton & why objects move	Chap. 4
	14 Sept.	gravity, Newton & Einstein	Chap. 5, 11.1-11.2
	21 Sept.	work, energy, power	Chap. 6
	28 Sept.	thermodynamics	Chap. 7
		MIDTERM 1 -- Friday 2 Oct. ** calculator + 1 page of notes allowed **	
	5 Oct.	light, electromagnetism	Chap. 8
	12 Oct.	EM waves, climate change	Chap. 9
	19 Oct.	Einstein & relativity	Chap. 10
	26 Oct.	quantum phenomena	Chap. 13, 14.1-14.2
	2 Nov.	quanta & atoms	14.5-14.7, 15.1-15.3
		MIDTERM 2 -- Friday 6 Nov. ** calculator + 1 page of notes allowed **	
W	9 Nov.	nuclei & radioactivity	Chap. 15
	16 Nov.	fission & fusion	16.1-16.5
F	23 Nov.	nuclear weapons	16.6-16.8
		& arms control	
	30 Nov.	energy options	Chap. 17
F	7 Dec.	review	Epilogue
		FINAL EXAM -- Friday 18 Dec. 1415-1615	

grades: 10% homework & in-class questions (once per week)
+ 20% each midterm
+ 50% final exam

Physics 100 Student Learning Outcomes

Students are expected to understand the important physics concepts, the context in which they were developed, and their connections to society. This includes

- 1) understanding of the scientific process
- 2) ability to apply physics concepts
- 3) ability to use and understand quantitative data

The ultimate goal is for students to be able to think critically about issues involving physics as citizens in a technological society.