

**PHYS 202 College Physics**

**Spring 2010**

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**Text:** Physics 8<sup>th</sup> ed by Young & Geller with Mastering Physics; PHYS 202 Lab Manual

**Optional:** Student Solutions Manual, Student Guide

<b>Grading:</b> 4 exams	60%
Final (comprehensive)	20%
Laboratory	10%
Recitation	5%
Homework (Mastering Physics)	5%

You must achieve 70% or better in the laboratory in order to pass the course.

If your grade on the Final Exam is higher than your lowest grade on one of the four exams during the semester, your grade on the Final will replace that one lowest exam grade in computing the course grade.

January 25 is the last day to drop with no record. April 6 is the last day to Q-drop.

**Final Exam :** May 12 10:30am - 12:30pm

**Syllabus:** (MC denotes multiple-choice problems)

Wk	Date	Topic	Sections in Text	Homework problems
1	Jan. 18	No Classes		
	Jan. 20	Coulomb's law	17: 1-4	MC17: 3,4,7,8
	Jan. 22	electric field	17: 5-6	17: 10,12,14,21,34,41,42,43,65,71,72
2	Jan. 25	Gauss's law	17: 7-9	MC17: 9; 17: 53,55,57,61,64
	Jan. 27	potential	18: 1-4	MC18: 2,3,7,11,14
	Jan. 29	capacitors	18: 5-6	18: 1,4,12,16,22,24,38,44,53,54,75,78
3	Feb. 1	dielectrics	18: 7-8	MC18: 4,5; 18: 63,64,70,71,81,82
	Feb. 3	dc circuits	19: 1-3	MC19: 2,3,5,6,10,13,14,15
	Feb. 5	resistor networks	19: 4-5	19: 6,18,29,31,33,42,48,50,51,52,53,72 19: 75,85
4	Feb. 8	multiloop, RC circuits	19: 6-8	19: 57,59,60,66,88,91
	Feb. 10	examples; review		
	Feb. 12	<b>Exam 1 Chs. 17-19</b>		
5	Feb. 15	magnetic force	20: 1-4	MC20: 2,4,6,7,8,11
	Feb. 17	magnetic force and torque	20: 5-6	20: 4,8,11,14,18,20,23,29,31,34
	Feb. 19	fields of wires	20: 7-10	20: 50,51,53,59,64,70,81,82,86,88
6	Feb. 22	induced emf	21: 1-5	MC21: 2,6,10,13,14,15
	Feb. 24	inductance	21: 6-9	21: 4,7,12,13,16,17,21,25,28,29
	Feb. 26	RL and LC circuits	21: 10-12	21: 33,37,49,54,55,62,64,72

7	Mar. 1	ac circuits	22: 1-3	MC22: 5,6,7,14; 22: 11,12,19,25
	Mar. 3	power; series resonance	22: 4-5; review	22: 26,27,36,41,45,46,47
	Mar. 5	<b>Exam 2 Chs 20-22</b>		
8	Mar. 8	em waves	23: 1-6	MC23: 1,2,3,8,11,12; 23: 14,16,21
	Mar.10	refelction, refraction	23: 7-10	23: 44,47,57,59,66,67,73,74,78,84
	Mar.12	images by mirrors	24: 1-3	MC24: 6; 24: 3,8,14,15,18,58,59
9	Mar.22	thin lenses	24: 4-6	MC24: 2,3,9; 24: 21,22,28,29,31,33,41 24: 45,47,52,55,56
	Mar.24	optical instruments	25: 1-3	MC25: 9,10,15
	Mar.26	angular magnification	25: 4-6	25: 9,11,20,22,30,31,34,40
10	Mar.29	interference	26: 1-2	MC26: 2,9,10,13
	Mar.31	thin films	26: 3	26: 4,7,9,54,55,59,63,64
	Apr. 2	No Class		
11	Apr. 5	diffraction	26: 4-9	MC26: 4,8; 26: 27,28,34,44,47,48,68
	Apr. 7	examples; review		
	Apr. 9	<b>Exam 3 Chs 23-26</b>		
12	Apr.12	photoelectric effect	28: 1	MC28: 1,2,3,4,5,10,13,16
	Apr.14	spectra; Bohr model	28: 2-4	28: 3,9,11,19,21,24,27,28,35,36
	Apr.16	wave nature of particles	28: 5-8	28: 41,45,49,50,55,60
13	Apr.19	atomic structure	29: 1-2	MC29: 1,6,8,9,10
	Apr.21	nuclei	30: 1-2	29: 2,5,6,7,13,14,31,40
	Apr.23	radioactivity	30: 3-4	MC30: 3,8,11,12,14,15; 30:1,3,5,10,12 30: 15,18,20,53,64
14	Apr.26	nuclear reactions	30: 5-7	30: 33,39
	Apr.28	examples; review		
	Apr.30	<b>Exam 4 Chs 28-30</b>		
15	May 3	examples; review		
	May 4	examples; review		

#### **Americans with Disabilities Act (ADA) Policy Statement:**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Cain Hall, Room B118, or call 845-1637.

#### **Academic Integrity Statement:**

“An Aggie does not lie, cheat, or steal or tolerate those who do.”\hfil\break

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