

Physics 202 College Physics

Spring 2009

Instructor: Artem G. Abanov

Office: ENPH529

Office Phone: 5-7799

Email Address: abanov@tamu.edu

Office Hours: TR 12:00-1:30

Text: Physics 8th Ed. by Young& Geller (Vol 2) with Mastering Physics

Physics 202 Lab Manual

Optional: Student Solutions Manual, Student Study Guide

Grading:

4 Exams	60%
Final (Comprehensive)	20%
Laboratory	10%
Recitation	5%
Homework(Mastering Physics)	5%
	<hr/> 100%

You must achieve a 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, the grade on the Final will replace that one lowest exam grade in computing the course grade. The Final Exam grade **cannot** be used to replace an exam that has been missed.

Note: January 26 is the last day to drop with no record. April 6 is the last day to Q-drop

Final Exam:

Syllabus: (“MC” denotes Multiple Choice Problems)

<u>Week</u>	<u>Date</u>	<u>Topic</u>	<u>Sections in Text</u>	<u>Problems</u>
1	Jan. 20 T Jan. 22 R	Coulomb’s law electric field; field lines	17:1–4 17:5–7	MC17: 3, 4, 7, 8 17: 10, 12, 14, 21, 34, 41, 42, 43, 65, 71, 72
2	Jan. 27 T Jan. 29 R	Gauss’ law; examples potential; capacitors	17:8–9 18:1–5	MC17: 9; 17: 53, 55, 57, 61, 64 MC18: 2, 4, 5, 11, 14 18: 1, 4, 12, 16, 22, 24, 38, 44, 75, 78, 81, 82
3	Feb. 3 T Feb. 5 R	capacitors; review <b>Exam I</b>	18:6–9 Chapts.17, 18	MC18: 3, 7; 18: 53, 54, 63, 64, 70, 71
4	Feb. 10 T Feb. 12 R	Ohm’s law; resistor networks Kirchhoff’s rules; RC circuits	19:1–5 19:6–8	MC19: 2, 3, 5, 6, 10, 13, 14, 15 19: 6, 18, 29, 31, 33, 42, 48, 50, 51, 52 19: 57, 59, 60, 72, 75, 85, 88
5	Feb. 17 T Feb. 19 R	magnetic forces sources of magnetic field	20:1–6 20:7–10	19: 66, 91; MC20: 2, 4, 7, 8, 11 20: 4, 8, 11, 14, 18, 20, 23, 29, 31, 34, 82
6	Feb. 24 T Feb. 26 R	Faraday’s law; Lenz’s law inductance	21:1–6 21:7–12	MC20: 6; 20: 50, 51, 53, 59, 64, 70, 86, 88 MC21: 2, 6, 10, 14, 15 21: 4, 7, 12, 13, 16, 17, 21, 25, 64

<u>Week</u>	<u>Date</u>	<u>Topic</u>	<u>Sections in Text</u>	<u>Problems</u>
7	Mar. 3 T Mar. 5 R	examples; review <b>Exam II</b>	Chapts. 19–21	MC21: 13; 21: 28, 29, 33, 37, 49, 54, 55, 62, 72
8	Mar. 10 T Mar. 12 R	ac circuits; resonance EM waves	22:1–5 23:1–8	MC22: 5, 6, 7, 14 22: 11, 12, 19, 25, 26, 27, 36, 41, 45, 46, 47
9	Mar. 24 T Mar. 26 R	polarization; mirrors refraction; thin lens	23:10; 24:1–3 24:4–6	MC23: 1, 2, 3, 8, 11, 12; 23: 14, 16, 21, 44 23: 47, 57, 59, 66, 67, 73, 74, 78, 84 MC24: 2, 3, 6, 9; 24: 3, 8, 14, 15, 18, 21, 22 24: 28, 29, 31, 33, 41, 45, 47, 52, 55, 56, 58, 59
10	Mar. 31 T Apr. 2 R	optical instruments <b>Exam III</b>	25:1–6 Chapts. 22–25	MC25: 9, 10, 15; 25: 9, 11, 20, 22, 30, 31, 34, 40
11	Apr. 7 T Apr. 9 R	interference diffraction	26:1–3 26:4–8	MC26: 2, 4, 8, 9, 10, 13 26: 4, 7, 9, 27, 28, 34, 44, 47, 48, 54 26: 55, 59, 63, 64, 68
12	Apr. 14 T Apr. 16 R	atoms and photons waves-particles; atoms	28:1–5 28:6–8	MC28: 1, 2, 3, 4, 5, 10, 13, 16 28: 3, 9, 11, 19, 21, 24, 27, 28, 35, 36 28: 41, 45, 49, 50, 55, 60
13	Apr. 21 T Apr. 23 R	atomic structure; review <b>Exam IV</b>	29:1–2 Chapts. 26, 28, 29	MC29: 1, 6, 8, 9, 10; 29: 2, 5, 6, 7, 13, 14, 31, 40
14	Apr. 28 T Apr. 30 R	nuclei; radioactivity nuclear reactions; review	30:1–4 30:5–7	MC30: 3, 8, 11, 12, 14, 15 30: 1, 3, 5, 10, 12, 15, 18, 20, 33, 39, 53, 64

**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.

The Honor Council Rules and Procedures may be found on the web at <http://www.tamu.edu/aggiehonor>