

Syllabus for PHY232, Fall 2001

Lecturers: Prof. Carl Bromberg

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Office: 251G Physics-Astronomy

Phone: 353-1809

Office hours: Thursday 2–4 PM, or by appt.
or by appointment.

Prof. Joey Huston

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Office: 251C Physics-Astronomy

Phone: 353-8783

Office hours: Tuesday 10:20-11:10 AM,
Wednesday 11:30 AM-12:20 PM, or by appt.

The lectures will be divided between Prof's Bromberg and Huston. Assistance with homework (and other questions about the material) will be available:

Mondays, 6 – 9 p.m., 209 PA ; Tuesdays, 12 – 2:30 p.m., 346 Giltner Hall.

TA: Joseph Paul, E-mail: pauljose@msu.edu

Lectures:

- Tues. and Thurs., at 7:00 PM-8:20 PM, room 118PA (see Course Schedule). Attendance is required.
- Required Textbook: College Physics, Serway and Faughn, 5th Ed. (as PHY231)

Course Topics:

- Course covers the topics shown in the **Course Schedule** (on the next page).

Homework (HW):

- There are 11 homework assignments as indicated in the **Course Schedule**.

Exams, in-class quiz & Grades

- At the beginning of class (starting Sept. 4), students must pick up **ONE (your own)** "bubble sheet", and return it at the end of class. Based on lecture, reading, or homework, at any time during class, quiz questions (multiple choice, 5 points each) may be asked. Approximately 10-15% of the grade will be determined by quizzes.
- Three **50-minute exams** (75 points each) will be given in lecture on the dates indicated in the Course Schedule. Each exam covers the chapters indicated.
- There is a 2 hr. final exam (for a total of 150 points); see Course Schedule.
- Documented medical (or other) excuses for **ONLY one exam, one quiz, and one late** HW assignment submitted up to one week late will be graded. Final exam weights compensate for *excused* absences.
- HW and grades: HW submitted on time will be graded (unless approved, late HW will not be graded). Homework grades are weighted to contribute a maximum of 60 points to point total. Before final exam on Dec. 10, all homework assignments must be submitted, or an I-grade for the course may be given.
- Grades are "curved" with the mean point score (out of ~500) receiving a 2.5.
- Check the **WEB** site, <http://www.pa.msu.edu/courses/phy232>, for syllabus, HW solutions, exam solutions, quiz solutions, scores, and grades. Please be patient. The web site is still being set up.

PHY232 Schedule**Fall 2001**

W	D	Date	L	Title	HW Due	Read Ch.
1	T	Aug. 28	1	Electric charge, Coulomb's law		15
	TH	Aug. 30	2	Electric fields, Gauss' law		15
2	T	Sept. 4	3	Electrical potential		16
	TH	Sept. 6	4	Capacitors		16
3	T	Sept. 11	5	Current and resistance	HW 1	17
	TH	Sept. 13	6	Current and resistance		17
4	T	Sept. 18	7	Resistors in series and parallel	HW 2	18
	TH	Sept. 20	8	RC Circuits		18
5	T	Sept. 25	9	Magnetism	HW 3	19
	TH	Sept. 27	10	50 minute exam Chaps 15-18		
6	T	Oct. 2	11	Magnetic fields		19
	TH	Oct. 4	12	Magnetic induction		20
7	T	Oct. 9	13	Magnetic induction	HW 4	20
	TH	Oct. 11	14	AC Circuits		21
8	T	Oct. 16	15	EM Waves	HW 5	21
	TH	Oct. 18	16	Reflection, refraction		22
9	T	Oct. 23	17	Geometric optics	HW 6	23
	TH	Oct. 25	18	50 minute exam Chaps 19-22		
10	T	Oct. 30	19	Interference		24
	TH	Nov. 1	20	Diffraction		24
11	T	Nov. 6	21	Optical devices	HW 7	25
	TH	Nov. 8	22	Relativity		26
12	T	Nov. 13	23	Quantum physics	HW 8	27
	TH	Nov. 15	24	Quantum physics		27
13	T	Nov. 20	25	Atomic physics	HW 9	28
	TH	Nov. 22		Thanksgiving Holiday		
14	T	Nov. 27	26	Nuclear physics	HW 10	29
	TH	Nov. 29	27	50 minute exam Chaps 23-28		
15	T	Dec. 4	28	Particle physics		30
	TH	Dec. 6	29	Summary and Review	HW 11	
16	T	Dec. 11		Final Exam Mon Dec 10 5:45-7:45 PM, room to be arranged		
				Chapters 15-30		