

Physics 212: Physics for Scientists and Engineers II (Fall 2012)

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Online: http://www.phy.olemiss.edu/~hamed/teaching/olemiss_212.html
Lectures: 11:00am - 12:15pm, TTh, HELD Lewis Hall, Room 101 (Auditorium)
Office Hours: 1:45pm - 2:50pm, TTh

Textbooks: “Physics for Scientists and Engineers” 8th Ed. By Serway and Jewett;

Teaching Assistant:

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Note:

1. The grades in this course will be determined by your performance on three term exams (20% each), final exam (30%), homework (10%), and bonus problems (5%). The grade ranges are: 90-105 = A; 80-90 = B; 65-80 = C; 50-65 = D. In order to earn the 5% of bonus problems you should solve all the assigned “challenge” problems.
2. If your grade on the Final Exam is higher than your lowest grade on one of the three term 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 was missed.
3. September 1st is the last day of refund period, and October 1st is the last day for course withdrawals.
4. **Final Exam:** December 4, Tuesday, 11:00am-1:00pm **Please note there is no make-up for the final.**
5. Access and do the homework problem online at <https://www.saplinglearning.com>

Week/Date	Chapter/Topic	Chapter/Homework
1 Aug 21; 23	Chapters 23, 24: Coulomb’s Law electric field, Gauss’ law	HW1: Chapters 23, 24; due T Aug 28
2 Aug 28; 30	Chapters 24, 25: Gauss’ law, electric potential	HW2: Chapters 24, 25; due T Sep 4
3 Sep 4; 6	Chapters 26, 27: Capacitors, Ohm’s law	HW3: Chapters 26, 27; due T Sep 11
4 Sep 11; 13	Chapters 27, 28: Ohm’s law, Kirchhoff’s rules	HW4: Chapters 27, 28; due T Sep 18
5 Sep 18; 20	Sep 18T Chapters 29: magnetic forces	Exam I HW5: Chapters 29; due T Sep 25
6 Sep 25; 27	Chapters 30, 31: sources of magnetic field, Faraday’s law	HW6: Chapters 30, 31; due T Oct 2
7 Oct 2; 4	Chapters 31, 32: Faraday’s law, inductance	HW7: Chapters 31, 32; due T Oct 9
8 Oct 9; 11	Chapters 33, 34: AC, EM waves	HW8: Chapters 33, 34; due T Oct 16

Week/Date	Chapter/Topic	Chapter/Homework
9 Oct 16; 18 Oct 18Th	<u>Chapters 34:</u> EM waves <u>Exam II</u>	HW9: Chapter 34; due Th Oct 18
10 Oct 23; 25	<u>Chapters 35, 36:</u> light, image formation	HW10: Chapter 34; due T Oct 30
11 Oct 30, Nov 1	<u>Chapters 36, 37:</u> image formation, wave optics	HW11: Chapter 34; due T Nov 6
12 Nov 6, 8	<u>Chapters 37, 38:</u> wave optics, polarization	HW12: Chapter 34; due T Nov 13
13 Nov 13, 15 Nov 15Th	<u>Chapter 38:</u> polarization <u>Exam III</u>	HW13: Chapter 34; due Th Nov 15
14 Nov 20; 22	Thanksgiving holiday	
15 Nov 27, 29	<u>Chapter 39:</u> Relativity	HW14: Chapter 34; due T Dec 4
16 Dec 4T	Final exam, 11:00am-1:00pm	

ADA 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 Office of Student Disability Services (SDS) at 234 Martindale Center (sds@olemiss.edu) phone: 662-915-7128

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Do Yourself (and Me) a Favor

Read about the topics before I discuss them in lectures. It is not necessary that you study them carefully, but at least get the “smell of it”. This should make it much easier for you to follow the lectures and that should make them more interesting.