

Physics 211: Physics for Scientists and Engineers I (Summer 2014)

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Online: <http://www.phy.olemiss.edu/~hamed>
Lectures: 8:00am - 9:50am, M T W TH F, HELD Lewis Hall, Room 101
Office Hours: 10:00am - 12:00pm, M W and by appointment

Textbooks: "Physics for Scientists and Engineers" 9th Ed. By Serway and Jewett;

Teaching Assistant: TBA

Notes:

1. The grades in this course will be determined by your performance in two term exams (20% each), final exam (40%), homework (10%), attendance (4%), pre-lecture quizzes (2%), in-class quizzes (2%), and bonus problems (2%). The grade ranges are: 90-100 = A; 80-90 = B; 65-80 = C; 50-65 = D.
2. The Final Exam will replace the worst of the two term exams if it is higher than any of them. The final exam grade cannot be used to replace a term exam that was missed.
3. May 30th is the last day of refund period, and June 6th is the last day for course withdrawals.
4. Final exam (comprehensive): Tuesday June 24th, 8:00am-11:00am. Please note there is no make-up for the final exam.
5. Access and do the homework problem online at <https://www.webassign.net> (see instructions*)

Week/Date	Chapter/Topic
1 May 28	Chapters 1&2: Dimensional analysis, motion in 1d
1 May 29	Chapter 3: Vectors
1 May 30	Chapter 4: Motion in 2d
2 June 2	Chapter 5: Motion laws
2 June 3	Chapters 6: Circular motion
2 June 4	Chapters 7&8: Work; energy; conservation of energy
2 June 5	<u>Exam I</u>
2 June 6	Chapter 9: System of particles, linear momentum
3 June 9	Chapter 10: rigid object, torque
3 June 10	Chapter 11: Angular momentum
3 June 11	Chapter 12: Static equilibrium
3 June 12	Chapter 13: Gravitation
3 June 13	Chapter 14: Fluid dynamics
4 June 16	Chapters 15&16: Simple harmonic motion, waves
4 June 17	Exam II
4 June 18	Chapters 17&18: Sound, resonance

Week/Date	Chapter/Topic
4 June 19	Chapters 19&20: Temperature, 1 st law of thermodynamics
4 June 20	Chapter 21: Kinetic theory of gases
5 June 23	Chapter 22: Entropy, 2 nd laws of thermodynamics
5 June 24	Final Exam (comprehensive), time: 8:00am -11:00am

***Online Homework (WebAssign Instruction)**

You must self-enroll, the class key for Phys 211 is: **olemiss 6031 7944**, please supply your entire student Id accurately in order for the system to transfer credit from Web Assign to Blackboard. Student quick start guide is available at: http://www.webassign.net/manual/WA_Student_Quick_Start.pdf

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.

Recitation Sessions

We will set up time (after 5:00 pm) for recitation sessions according to the students’ schedule and the room availability. The recitation sessions are very important in order to practice solving the homework problems, enforce the physics concepts, and to obtain a good grade in this course.

Disclaimer

This is a tentative syllabus and a slight adjustment might be made in due course.

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

Academic Integrity statement

As an Olemiss student I have abided by the UM academic integrity policy. My words and actions will reflect Academic Integrity. I will not cheat or lie or steal in academic matters.

I will promote integrity in the University of Mississippi community. For more information, refer to:

http://www.olemiss.edu/depts/general_library/instruction/resources/plagiarism_resources/reinforcing.html

Objective

This course is primarily about motions of objects and forces, which underlie these motions. The theory that describes the motion of “large mass” objects, which move with low speed compared to the speed of light, was developed by Isaac Newton in the 17th century and is called "classical mechanics". Historically, this theory gave a foundation for development of all modern physics. Therefore, this course is an introduction to physics in general. Physics in turn provides a foundation for most other natural sciences and engineering. This course has several rather broad goals. They include that you develop a good understanding of a few important concepts in physics, learn to apply these concepts to familiar and unfamiliar situations, and gain the ability to reason qualitatively and quantitatively about physics.