Physics 211: Physics for Scientists and Engineers I (Spring 2013)

Instructor: Dr. Ahmed M. Hamed
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Online: http://www.phy.olemiss.edu/~hamed/olemiss_211.html
Lectures: 11:00am - 12:15pm, TTh, HELD Lewis Hall, Room 101 (Auditorium)
Office Hours: 1:45pm - 2:50pm, TTh and by appointment

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. February 4th is the last day of refund period, and March 4th is the last day for course withdrawals.
4. **Final exam (comprehensive)**: May 7th, 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.webassign.net (see instruction*)

Week/Date	Chapter/Topic	Chapter/Homework
1 Jan 22; 24	**Chapters 1, 2:** Dimensional analysis; motion in one dimension	HW1: Chapters 1, 2; due T Jan 29
2 Jan 29; 31	**Chapters 3, 4:** vectors; motion in 2d	HW2: Chapters 3, 4; due T Feb 5
3 Feb 5; 7	**Chapters 5, 6:** motion laws; circular motion	HW3: Chapters 5, 6; due T Feb 12
4 Feb 12; 14	**Chapters 7, 8:** work; energy; conservation of energy	HW4: Chapters 7, 8; due T Feb 19
5 Feb 19; 21	**Chapter 9:** conservation of linear momentum **Feb 21st** **Exam I**	HW5: Chapter 9; due T Feb 26
6 Feb 26; 28	**Chapters 10, 11:** rigid object; angular momentum	HW6: Chapters 10,11; due T Mar 5
7 Mar 5; 7	**Chapters 11, 12:** angular momentum; static equilibrium	HW7: Chapters 11,12; due T Mar 12
8 Mar 12; 14	**Spring Break**	
9 Mar 19; 21	**Chapters 12, 13:** static equilibrium; gravitation **Mar 21st** **Exam II**	HW8: Chapters 12,13; due T Mar 26

Week/Date	Chapter/Topic	Chapter/Homework
10 Mar 26; 28	**Chapters 14:** fluid dynamics	HW9: Chapter 14; due T Apr 2
11 Apr 2; 4	**Chapters 15, 16:** Simple harmonic motion; waves	HW10: Chapters 15,16; due T Apr 9
12 Apr 9, 11	**Chapters 17, 18:** Sound waves; resonance	HW11: Chapters 17,18; due T Apr 16
13 Apr 16, 18	**Chapters 19, 20:** Temperature; 1st law of thermodynamics **Apr 18Th** **Exam III**	HW12: Chapters 19,20; due T Apr 23
14 Apr 23, 25	**Chapter 21:** Kinetic theory of gases	HW13: Chapter 21 due; T Apr 30
15 Apr 30, May 2	**Chapter 22:** Entropy; 2nd law of thermodynamics	HW14: Chapter 22; due T May 7
16 May 7th	**Final exam (comprehensive), 11:00 am-1:00 pm**	

*Online Homework (WebAssign Instruction):

You must self-enroll, the class key for Physics 211 is: **olemiss 0013 5689**, please supply your entire student Id accurately in order for the system to transfer credit from Web Assign to Blackboard.

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.

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

Disclaimer:

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