

## Physics 211: Physics for Scientists and Engineers I (Fall 2012)

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Online: [http://www.phy.olemiss.edu/~hamed/teaching/olemiss\\_211.html](http://www.phy.olemiss.edu/~hamed/teaching/olemiss_211.html)  
Lectures: 8:00am - 9:15am, TTh, HELD Lewis Hall, Room 101 (Auditorium)  
Office Hours: 9:30am - 10:40am, 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 1<sup>st</sup> is the last day of refund period, and October 1<sup>st</sup> is the last day for course withdrawals.
4. **Final Exam:** December 4, Tuesday, 8:00-10:00am **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	<b>Chapters 1, 2:</b> Dimensional analysis; motion in one dimension	HW1: Chapters 1, 2; due T Aug 28
2 Aug 28; 30	<b>Chapters 3, 4:</b> vectors; motion in 2d	HW2: Chapters 3, 4; due T Sep 4
3 Sep 4; 6	<b>Chapters 5, 6:</b> motion laws; circular motion	HW3: Chapters 5, 6; due T Sep 11
4 Sep 11; 13	<b>Chapters 7, 8:</b> work; energy; conservation of energy	HW4: Chapters 7, 8; due T Sep 18
5 Sep 18; 20	<b>Sep 18T</b> <b>Chapter 9:</b> conservation of linear momentum	<b>Exam I</b> HW5: Chapter 9; due T Sep 25
6 Sep 25; 27	<b>Chapters 10, 11:</b> rigid object; angular momentum	HW6: Chapters 10,11; due T Oct 2
7 Oct 2; 4	<b>Chapters 11, 12:</b> angular momentum; static equilibrium	HW7: Chapters 11,12; due T Oct 9
8 Oct 9; 11	<b>Chapters 12, 13:</b> static equilibrium; gravitation	HW8: Chapters 12,13; due T Oct 16

Week/Date	Chapter/Topic	Chapter/Homework
<b>9</b> Oct 16; 18 <b>Oct 18Th</b>	<b><u>Chapters 14:</u></b> fluid dynamics <b><u>Exam II</u></b>	HW9: Chapter 14; due Th Oct 18
<b>10</b> Oct 23; 25	<b><u>Chapters 15, 16:</u></b> Simple harmonic motion; waves	HW10: Chapters 15,16; due T Oct 30
<b>11</b> Oct 30, Nov 1	<b><u>Chapters 17, 18:</u></b> Sound waves; resonance	HW11: Chapters 17,18; due T Nov 6
<b>12</b> Nov 6, 8	<b><u>Chapters 19, 20:</u></b> Temperature; 1 <sup>st</sup> law of thermodynamics	HW12: Chapters 19,20; due T Nov 13
<b>13</b> Nov 13, 15 <b>Nov 15Th</b>	<b><u>Chapter 21:</u></b> Kinetic theory of gases <b><u>Exam III</u></b>	HW13: Chapter 21 due; Th Nov 15
<b>14</b> Nov 20; 22	<b>Thanksgiving holiday</b>	
<b>15</b> Nov 27, 29	<b><u>Chapter 22:</u></b> Entropy; 2 <sup>nd</sup> law of thermodynamics	HW14: Chapter 22; due T Dec 4
<b>16</b> Dec 4T	<b>Final exam, 8:00-10:00 am</b>	

#### **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](mailto: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](http://www.olemiss.edu/depts/general_library/instruction/resources/plagiarism_resources/reinforcing.html)

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.