

# Physics 11 - Spring 2009

(Physics 9 please see instructor)

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Please record...

Recitation instructor and section number:


Their contact information:

**Textbook, MasteringPhysics and “clicker:”** 1) "University Physics, Volume 1," Hugh D. Young and Roger A. Freedman, Twelfth Edition, Pearson Addison-Wesley, 2008. Make sure your purchase includes chapters 1-14 and 17-20. 2) A subscription to the MasteringPhysics online homework system is required and can be purchased bundled with the textbook, separately from the bookstore or publisher, or subscribe on-line at <http://www.masteringphysics.com>. Please note that this subscription includes access to an on-line version of the textbook. 3) An audience response “clicker” is required for graded lecture activities.

**Reading Assignments** are essential and required! They should be completed **before** the material is discussed in lecture. (Occasional quizzes will be given at the beginning of the lecture.)

**Attendance** at lecture and recitation is required for continued enrollment in the course under University policy (see section 3 of Rules and Procedures).

**Written Homework** will be submitted at the beginning of lecture in the correct bin for your recitation instructor. (Please put your section number and instructor's name on your paper.)

Keeping in mind that your goal is to be able to solve physics problems by yourself on the exams:

- 1) The assignments are graded primarily on whether you've made a serious effort instead of numerical accuracy, so it is far better to actually work on the problems than to copy somebody else's perfect solution,
- 2) Start working on the assignments **early** so that if you get stuck, you have time to discuss the problems with your coursemates or recitation instructor.

**Quizzes:** Seven quizzes are given during recitations. The quiz questions are typically similar to homework problems. The numbers in parentheses indicate the homework assignments covered by that quiz. Only your highest five quiz scores are used in the computation of your course grade. Missed quizzes count as a zero.

**Exams:** Two midterm hour tests will be given during "4 o'clock quiz" weeks. If an hour test must be missed for a valid reason, the scaled score from the corresponding section of the final exam will be substituted. The exams will be "closed book" but you will be supplied with an equation sheet and you will receive information about bringing in a page of your own notes. The final exam will be cumulative.

Course Grading:	Hour Test 1 (Wed, Feb 18)	100	
	Hour Test 2 (Wed, April 1)	100	
	Homework (80 written, 20 MP)	100	
	Recitation Quizzes (best 5 out of 8)	50	
	Recitation Attendance	25	
	Lecture Quizzes	25	
	Final Exam	200	
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	TOTAL	600	(Athletes: Please send sports evaluation forms to your recitation instructor only.)

**University Policies:** We fully support accommodations for religious or disability reasons. We fully enforce standards of academic integrity. Please do not hesitate to contact Prof. Licini or your recitation instructor.

**RELIGIOUS HOLIDAYS:** *(Extracted from memo sent by University Provost and Chaplain.)*

1. Inform your instructor that you will be absent from class due to observance of religious holidays.
2. Arrange with the instructor to complete assignments or any required make-up work.
3. If you run into difficulties negotiating an acceptable resolution, please call the University Chaplain, Dr. Lloyd Steffen, at x83877 or e-mail him at lhs1. (Religious holidays are posted on the Chaplain's web page at <http://www.lehigh.edu/~incha/holidays.html>)

**Accommodations for Students with Disabilities:** If you have a disability for which you are or may be requesting accommodations, please contact both your instructor and the Office of Academic Support Services, University Center C212 (610-758-4152) as early as possible in the semester. You must have documentation from the Academic Support Services office before accommodations can be granted.

**STATEMENT ON IRRESPONSIBLE ACADEMIC BEHAVIOR:** (after Prof. Barry Bean, Biology)  
There are many forms of irresponsible behavior that can ruin opportunities for you or for others in this course; there is no room and no excuse for bad behavior. Examples of irresponsible behavior cover a wide range, and include cheating, plagiarism, creating hazards or disruptions, slacking on responsibilities, unfairly exploiting the efforts of others, etc. Appropriate penalties should be expected. Offenders may lose points from their course totals, and serious offenders may be dropped from the course. Further explanation and guidelines on academic integrity at Lehigh can be found on the University Student Conduct System web page ([http://www.lehigh.edu/~indost/conduct/hbook\\_4.html](http://www.lehigh.edu/~indost/conduct/hbook_4.html)) and on the Fostering Academic Integrity at Lehigh University web site (<http://www.lehigh.edu/academicintegrity>).

It is firm policy in this course that cheating or plagiarism are unacceptable violations of academic integrity, and will earn an F as the semester grade in the course. **ALL EXAMS AND QUIZZES ARE REQUIRED TO BE STRICTLY YOUR OWN INDIVIDUAL WORK!**

**HOMEWORK COLLABORATION POLICY:** (after Prof. Edwin Kay, CSE)

Learning on homework assignments allows for healthy cooperation and collaboration. In grappling with the course work, the SHARING of ideas is educationally useful. The COPYING of ideas is destructive, fraudulent, and unacceptable.

It is difficult to know where to draw the line between educationally useful sharing of ideas and the educationally destructive copying of ideas. I will paraphrase Roger D. Eastman of Loyola College (attributing the source material!): "I encourage you to help each other with homework assignments, but I also want you to understand where the help should stop. Don't take someone else's solution to copy or "for reference," or give yours for copying or "for reference." If you want to show someone your solution to illustrate the trouble you are having, that's fine; if you want to brainstorm about what the assignment requires and how to approach it, that's fine; if you want to share your knowledge of physics, that's fine; but letting someone copy your solution line by line, in fact or spirit, is not fine." Working together on troublesome areas, then continuing individually is a good technique. It is okay to tell the other person what is wrong and coach them toward solving the problem, but do not simply provide the correct equations.

Please note that the homework grading policy is designed so that making a serious attempt earns most of the points. In fact, indicating on your homework where you get stuck or have trouble will INCREASE the chance that you will get some notes of advice from the grader that will actually help you learn how to solve that type of problem. Submitting a copy of someone else's perfect solution will lead to LOWER exam scores since you will be unprepared to work the problems on your own.

## PHYSICS 11 – Tentative Schedule for Spring 2009

DATE	TOPIC	READING
M Jan 12 (L1)	RATES: Position, velocity, acceleration	2.0 to 2.3
Tu Jan 13 (R1)	Units, dimensions	1.0 to 1.6
W Jan 14 (L2)	Constant acceleration	2.4 to 2.s
Th Jan 15 (R2)	HW1, vectors	1.7 to 1.9
M Jan 19 (L3)	Motion in 2D and 3D	3.0 to 3.3
Tu Jan 20 (R3)	HW2	
W Jan 21 (L4)	Kinematics Wrap-up	3.4 to 3.s
Th Jan 22 (R4)	HW3	
M Jan 26 (L5)	Newton's Laws, force diagrams	4.0 to 4.s
Tu Jan 27 (R5)	HW4, Quiz 1 (on HW 1-3)	
W Jan 28 (L6)	More Newton's Laws	5.0 to 5.3
Th Jan 29 (R6)	HW5	
M Feb 2 (L7)	Paths, (centripetal acceleration)	5.4 to 5.s
Tu Feb 3 (R7)	HW6, dot product	1.10 to 1.s
W Feb 4 (L8)	Newton Wrap-up, Work and dot product	1.10 & 6.1
Th Feb 5 (R8)	HW7, Quiz 2 (on HW 4-6)	
M Feb 9 (L9)	Work and kinetic energy	6.0 to 6.s
T Feb 10 (R9)	HW8	
W Feb 11 (L10)	Potential energy	7.0 to 7.3
Th Feb 12 (R10)	HW9, Quiz 3 (on HW 7-8)	
M Feb 16 (L11)	Energy wrap-up	7.4 to 7.s
T Feb 17 (R11)	HW10, Review	
W Feb 18 (L12)	Review, <b>Hour Test 1 @ 4pm</b>	review
Th Feb 19 (R12)	HW11	
M Feb 23 (L13)	CM motion, momentum	8.0 to 8.3
Tu Feb 24 (R13)	HW12	
W Feb 25 (L14)	Systems, collisions	8.4 to 8.s
Th Feb 26 (R14)	HW13, Quiz 4 (HW 9-12)	
March 2-6	SPRING BREAK	a novel

<b>DATE</b>	<b>TOPIC</b>	<b>READING</b>
M Mar 9 (L15)	Rotation, energy	9.0 to 9.s
Tu Mar 10 (R15)	HW14, cross product	1.10 to 1.s
W Mar 11 (L16)	Torque, angular momentum	10.0 to 10.5
Th Mar 12 (R16)	HW15, Quiz 5 (HW 13-15)	
M Mar 16 (L17)	Angular momentum conservation	10.5 to 10.s
Tu Mar 17 (R17)	HW16	
W Mar 18 (L18)	Statics	11.0 to 11.s
Th Mar 19 (R18)	HW17	
M Mar 23 (L19)	Gravitation and Astronomy	12.0 to 12.s
Tu Mar 24 (R19)	HW 18	
W Mar 25 (L20)	Oscillations	13.0 to 13.s
Th Mar 26 (R20)	HW19, Quiz 6 (HW 16-18)	
M Mar 30 (L21)	Temperature, expansion	14.0-14.2, 17.0-17.4
Tu Mar 31 (R21)	HW20, review	
W Apr 1 (L22)	Review, <b>Hour Test 2 @ 4pm</b>	review
Th Apr 2 (R22)	HW21	
M Apr 6 (L23)	Heat capacity & transfer	17.5 to 17.s
Tu Apr 7 (R23)	HW22, Quiz 7 (HW 19-21)	
W Apr 8 (L24)	Molecular properties	18.0 to 18.s
Th Apr 9 (R24)	HW23	
M Apr 13 (L25)	Processes	19.0 - 19.7
Tu Apr 14 (R25)	HW24	
W Apr 15 (L26)	Heat Engines	19.8 – 20.3
Th Apr 16 (R26)	HW25, Quiz 8 (HW 22-24)	
M Apr 20 (L27)	Second Law, Carnot	20.4 – 20.6
Tu Apr 21 (R27)	HW26	
W Apr 22 (L28)	Entropy	20.8 – 20.s
Th Apr 23 (R28)	HW27	
Sat Apr 25 (R29)	RCS review session for recitation	
M Apr 27 (L29)	RCS review session for lecture	
Apr 28 – May 6	Final Exam Scheduled by Registrar	