

Fundamental Physics I

PH 241, Fall 2008

Syllabus

Instructor: Dr. Stephen Weppner
 Text: **Physics for Scientists and Engineers**, 4th edition; by Giancoli
 Moodle: <http://home.eckerd.edu/moodle>
 Eckerd Wiki: <http://academics.eckerd.edu/facultywiki>
 Office Location: SHC 105A
 Office Hours: M,Th 1:30-4:30, Th 9:30-11:30
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Week of:	Chapter	Contents
Sept. 1	1/2	Measurement, Velocity
Sept. 8	2	One Dimensional Motion
Sept. 15	3	Two Dimensional Motion
Sept. 22	4	Forces
Sept. 29	4	Forces (cont)
Oct. 6	5	Applications
Oct. 13	7	Work
Oct. 20	8	Energy
Oct. 27	9	break , Momentum
Nov. 3	10	Momentum and Rotational Motion
Nov. 10	11	General Rotation
Nov. 17	12/13	Equilibrium and Fluids
Nov. 24	13	Fluids, break
Dec. 1	14/15	Waves

Grading Chart	%
EXAM 1 (Wed., Oct. 8th)	15%
EXAM 2 (Wed, Nov. 5th)	15%
FINAL [comprehensive]	22%
6 quizzes	22%
Problem assignments	16%
Laboratory	10%

Notes for Fundamental Physics - PH 241N

- Grades will be as follows:
 - 93%-100% → A
 - 90%-93% → A-
 - 87%-90% → B+
 - 83%-87% → B
 - 80%-83% → B-
 - 77%-80% → C+
 - 73%-77% → C
 - 70%-73% → C-
 - 65%-70% → D
 - 0%-65% → F
- The course objective is to gain an understanding of fundamental physics principles of mechanical systems. To understand in a quantitative fashion the physical laws which describe our observations of the world around us.
- Eckerd College has a very strict policy on academic dishonesty. Anyone found plagiarising on an exam or a lab report will receive an F in the course. You are required to affirm that all work you do is in accordance with the Eckerd College Honor Code by writing 'Pledged' on all assignments. Working together on homework assignments is encouraged.
- The honor code reads as: **On my honor, as an Eckerd College student, I pledge not to lie, cheat, or steal, nor to tolerate those behaviors in others.**
- Up to 20 points of extra credit can be earned on each quiz by helping to contribute to the Physics Wiki page which will be used by the class on the tests (top quiz grade can be 110 points).
- Bring a pencil and calculator to exams. Make-up exams will be arranged only for pre-approved valid reasons. For each exam you will also be allowed to bring one half of an 8.5 x 11 sheet of paper with handwritten formulas and your Physics Wiki pages
- Each lecture will have assigned readings and problems from the textbook. The previous week's homework (**boldfaced** on assignment sheet) will be collected on date shown. Late homework assignments will be significantly penalized but as long as complete you will never get lower than a 30%.
- At various times throughout the semester (usually in lab), 6 quizzes will be given. These quizzes will be one problem that will last approximately twenty minutes.
- The laboratory grade will be based on attendance, write-ups, and lab assignments You must participate in all laboratories to pass the course.
- The last day to withdraw from class is Fri, Nov. 7th, 2008.
- Solutions to the problems assigned, old tests, quizzes can be found on the Eckerd *Moodle* website.
- In the event of a hurricane, assignments would be based on book problems and would be posted on the Wiki page and *Moodle*. There would also be discussion pages on the Wiki to help learn the material.

Assignments for PH 241N Sept. 1 - Oct. 6, 2008

The problem assignments are due on Sept. 10th, Sept. 22nd, and Oct. 3rd.

Day	Reading Assignment	Problems
Sept. 1	Chap. 1	1: Math Worksheet 1.16, 25
Sept. 3	Chap. 2.1-3	2: 3, 11, 19
Sept. 5	Chap. 2.4-6	2: 23, 31, 34, 41, 44
Sept. 8	Chap. 2.7	2: 51, 57, 60
Sept. 10*	Chap. 3.1-3	3: 5, 9, 15
Sept. 12	Chap. 3.4-6	3: 21, 23, 25
Sept. 15	Chap. 3.7	3: 29, 32, 33, 35
Sept. 17	Chap. 3.8	3: 38, 44, 49, 53
Sept. 19	Chap. 3.9-10	3: 58, 61
Sept. 22*	Chap. 4.1-3	4: 1, 4
Sept. 24	Chap. 4.4-5	4: 5, 10, 18, 22
Sept. 26	Chap. 4.6-7	4: 23, 33, 35, 46
Sept. 29	Chap. 4.8	4: 48, 51, 53
Oct 1	Chap. 5-1	5: 5, 13, 18, 23
Oct 3*	Chap. 5-2 to Chap. 5-4	5: 35, 45, 52
Oct. 6	Review	—