

PHYS OF HOW THINGS WORK

Phys 101

University of South Carolina

Main Campus

Session: 08/19812/02'11

Lecture Class: PSC 201, 10:10 am-11:00 pm, MWF.
HW-PSC 208, please see your individual class schedule.

Final Exam: 9:00 am, in class, Tuesday 6th Dec 2011

Tentative Test dates: Sep.2, Test#1; Oct.7, T#2; Nov.18, T#3

Professor: T. Datta

Office: PSC 501/502 (777-8104) 12:30 pm -1:30 pm MW & by appointment

Contact: datta@sc.edu (NB: grades will be discussed only in person but not by email/phone)

Lecture class/notes: Large parts of this course will be lectures from my personal notes.

Companion Book: Physics: Concepts + Connections by Art Hobson; ISBN 978-0-4321-66113-5.

Topics & course description: The man made world is filled with gadgets. Most aspects of our lives happen as if by some magic. Each and every one of these gizmos is based on well understood logical principles. Physics of how things work is a beginner's course to understand the basic principles of science that gives us the marvelous technology of the modern life.

Learning outcome & goals: After successfully completing Phys 101 the student will learn how to critically analyze the basic principles and compute numerical answers. The goal is to learn basic physical principals by studying the workings of nature and from man made technology. This course will help you to anticipate and shape your future progress and become an educated consumer & citizen.

Take Home work: Charts, tables, graphs, figures, qualitative & quantitative problems via LONCAPA

In class work: Question & answers, working out examples and several pop quizzes.

Tests & Exams: Two 1hr tests & Final (ID s may be checked @ tests).

Grading: Effort is expected but not graded :Tests 50% + HW 30% & in-class work 20%

Scale: Standard 10 pt, viz., 100-90% = A, 89-80% = B, etc.

Tentative Fall 2011 Calendar for Phys 101

- Consult Registrar's web page) for academic dates
- Last W" date Aug 24 & "" date Oct 13

Week	Chapters	Comments
Weeks # 1- 3	Chs. 1-3	Up to mechanical things
Weeks # 4- 5	Chs. 4 & 5	Mech & fluids.
Weeks # 6- 7	Chs. 6 – 9	Hot things+
Weeks # 8- 10	Chs. 9-14	From wave to electronics
Week # 11- 13	Chs. 15-18	Nucl power to batteries

- Through out the session test dates will be chosen after open discussions in class.
- Attendance may be taken at random for record keeping. More than Three unexcused absences may cause loss of grade.
- Makeup tests only with written medical or family excuses.
- Requests for incomplete grade "I" has to be made in writing and conditions negotiated should be written down and agree upon. Verbal will not be enough.
- Requests for recommendation letters will have to be made in person.