

## Course Outline

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Course: Phys 213 General Physics I- Section 4

Instructor: Dr Alakabha Datta

Office: 209 Lewis Hall

Meeting: M-W-F 1pm-1.50 pm at Lewis 101

Office Hours: T-Th 2 pm-3 pm or by appointment.

Email: datta@olemiss.edu, datta@phy.olemiss.edu

Phone: (662) 915-5611

Course homepage: Check Blackboard

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**NOTE: You should take the Lab Phys 223 along with this course if you have not passed it already.**

- **Pre-requisite: (Math 121 and Math 123) or Math 261**

SEVENTH EDITION

# PHYSICS



DOUGLAS C.

GIANCOLI

MP code: DATTA213  
MP course ID: Phy213DATTA

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Course Goals: Learning basic laws of physics and its application to various sciences, especially life sciences and to everyday life. You will also learn to analyze problems logically and systematically. This is the first part of the General Physics program- the second part will be covered in Physics 214. In the first part we will mainly discuss laws of motion, physics of fluids, waves, kinetic theory and heat.

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Marking:

Homework: 30 %

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Homework: I will assign weekly homework that has to be turned in one week. No late homework will be accepted after the due date. Please write your name in block letters and include the problem set number with your homework. You can get help to do your homework (including help from the internet) but turn in your own work. Do not copy from someone. You are not authorized to use the Instructor's Solution Manual. There is a tutoring room available for help with your homework.

Homework solutions will be emailed to all students and will be posted on Blackboard.

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Tests: 45%

There will be 3 tests each worth 15% and will roughly given at intervals of a month. Each test will cover one class period (50 mins). The dates will be announced later but you will be notified in advance of the test date and the topics included in the test. One of the tests will be given and graded before the last day to drop the course.

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Final Exam: 25%

The final exam will be based on chapters covered after the last test though you will be required to use material and concepts covered in earlier chapters not included in the final exam. In the final exam you will be tested on basic concepts like working with vectors. The exam will be at most 2 hours.

Time of Final Exam: Monday Dec 6, 2017 at noon (See Class Schedule)

An overall course average of the following percentages will guarantee the corresponding letter grade:

90%	A
80%	B
70%	C
60%	D

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Topics Covered in course: Topics will be taken from the following chapters.

## **Table of Contents**

1. Introduction, Measurement, Estimating
2. Describing Motion: Kinematics in One Dimension
3. Kinematics in Two Dimensions; Vectors
4. Dynamics: Newton's Laws of Motion
5. Circular Motion; Gravitation
6. Work and Energy
7. Linear Momentum
8. Rotational Motion
9. Static Equilibrium; Elasticity and Fracture
10. Fluids
11. Oscillations and Waves
12. Sound
13. Temperature and Kinetic Theory
14. Heat
15. The Laws of Thermodynamics

Attendance: There is no attendance requirement. However if you miss an exam or cannot turn in HW on time because of illness I will require a doctor' note. If you will away on other reasons inform me prior to your absence and get a note if applicable.

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Academic Integrity: We will follow the University's policy of academic integrity ( M-book). Violations of these policies will result in a failing grade and other disciplinary actions. In particular you are not allowed the use of the Instructor's Solution Manual.