SPRING SEMESTER, 2015 Syllabus for PHYSICS 310: Mechanics

Lecture time/place: Saturday, 12:00-2:30 p.m., Tutoring Room

Instructor: Shanmuka Shivashankara Instructor's Office: Room 22 Lewis

e-mail address: sshivash@go.olemiss.edu
Office Hours: e-mail me or visit tutoring room

Text:

Analytical Mechanics, 7th edition, by G. R. Fowles & G. L. Cassiday

READ THE BOOK!! Read each chapter when we begin discussing it in class.

## Goals:

In this course we cover many aspects of classical mechanics. The course will be based on Newton's laws. Among the subjects we will discuss are oscillations, non-inertial reference frames, gravity and orbits, rigid body motion, and Lagrangian mechanics. As in most physics classes, critical thinking, analytical reasoning, and problem solving skills will be emphasized. These abilities are crucial in physics (and can be carried over into many other fields or endeavors).

**Grading Scale:** 

A's: 90 - 100%, B's: 80 - 89%, C's: 70 - 79% A

C's: 70 - 79%, etc.

Grades will be based on quizzes, mid-term, and final exam:

Quizzes: 1/3 (based on assigned problems, textbook, and notes)

Mid-term: 1/3
Final exam: 1/3
Total: 100 %

Class attendance is not required, but is strongly encouraged since almost everything you need to know in the class will be discussed in class. Arriving late to class or leaving early distracts everyone (me especially). Both are rude, so

please avoid them. If you are taken ill during class, feel free to leave immediately.

It is the policy of the University of Mississippi to provide, on a flexible and individual basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or meet course requirements. Students with disabilities, which have been verified through the Office of Student Disability Services, need to contact me at the beginning of the semester to discuss their individual needs for accommodations.