

## SPRING SEMESTER, 2006

### Syllabus for PHYSICS 310: Mechanics

Lecture time/place: MWF, 9:00-9:50 a.m., Room 109 Lewis Hall

Professor: Dr. Thomas Marshall

Professor's Office/phone number: Room 108 Lewis, 915-5325

Professor's E-mail address: marshall@olemiss.edu

Text: *Analytical Mechanics*, 7<sup>nd</sup> edition, by G. R. Fowles & G. L. Cassiday  
READ THE BOOK!!

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%, etc.

Grades will be based on homework, tests, and the final exam:

Homework	30 %
Two tests	20 % each
Final exam	<u>30 %</u>
	100 %

Homework is assigned weekly (approximately) and is due two class meetings later. (E.g., homework assigned on a Monday is due at the beginning of class on the following Friday.)

#### Homework Rules:

1. Homework is due at the **beginning** of class on the due date.
2. Homework paper should be 8.5 x 11 inches with no torn or tattered edges.  
Homework papers should be stapled.
3. Show all your work; the answer alone is not worth anything. Homework problems must include enough English to be understandable.
4. Homework answers should have units and a reasonable number of significant digits.

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.