PHY 3221 - Mechanics I  
Fall Term 2005  

**Time and Place:** Monday, Wednesday and Friday, Period 3 (9:35-10:25 am), 1002 New Physics Building (NPB).  
**Final Exam:** Thursday, December 15, 3:00 - 5:00 pm  
**Instructor:** Amlan Biswas  
Office: 2255 NPB  
Phone: 392-8592  
Lab: B32 NPB  
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**Office hours:** Monday, Wednesday, Friday period 6, 12:50 pm-1:40 pm. At other times, please email and confirm.  

**Textbook:**  

**Prerequisites:**  
Introductory physics with calculus at the level of *Halliday and Resnick* and multivariable calculus. A course in differential equations is recommended but not required.  

**Synopsis:**  
This is the first of a two semester sequence on classical mechanics. We will cover Chapters 1-3 and 5 of *Thornton and Marion*, with supplemental materials to be posted on this web site. Topics to be covered include: dimensional analysis and units, kinematics in one and two dimensions, Newtonian mechanics for a single particle, conservation laws, oscillations (forced and damped, resonance, some simple Fourier analysis), gravitation (conservative forces, gravitational potential, tides).  

**Grading policy:**  
There will be approximately one homework assignment per week, due on Wednesdays and will be returned to the student one week later. Make your solutions neat, concise, and intelligible. Points may be deducted if it is difficult to find and/or understand the solutions. Late homework: 75% credit for 1 day late, 50% credit for 2 days late, 0% thereafter.  

In addition to the homework assignments, there will be two in class tests, tentatively scheduled for September 30 and November 4, and the final exam. Details about the exam formats will be posted here.  
The homework is 30% of your grade, the quizzes 20% each, and the final is 30%. Here is a guideline for your final grade, as a percentage of the total number of points (scaled as above): 85-100, A; 65-84, some type of B; 50-64, some type of C; below 50, will be decided by the instructor. These numbers may be lowered, depending upon numerous factors, but will not be raised. The course grades are not curved.  

**Grader:** R. Das, email: rdas@phys.ufl.edu, Office: 1228 NPB, Phone: 352-392-1668  

**Holidays (no classes):**  
Labor Day, Sept. 5; Homecoming, Oct. 7; Veteran's day, Nov. 11, Thanksgiving, Nov. 25.