PHYSICS 161 - Spring 2008
University of Maryland
Department of Physics
www.elms.umd.edu
www.masteringphysics.com
clickers.umd.edu

TITLE: **General Physics: Mechanics & Particle Dynamics (3 Credits)**

INSTRUCTOR: Prof. Emeritus G.C. Goldenbaum
Room 0106,
Physics Building
email: ggoldenb4@verizon.net
Office Hours 3pm Wednesdays or by appointment

TEACHING ASSISTANTS:

TEXT: R, D, Knight, *Physics For Scientists & Engineers, 2nd Edition*

CLICKERS: Purchase a clicker from the book store and register irt at clickers.umd.edu

LECTURES: Rm. 1412 (Physics Bldg.), MWF 2:00 pm – 2:50 pm

DISCUSSION:

Sect.	Day	Time	Room
0301	Tu	3:00 - 3:50 pm	PHY 4208
0302	Tu	4:00 - 4:50 pm	PHY 4208
0304	Th	4:00 - 4:50 pm	PHY 4220
0305	F	10:00 - 10:50 pm	PHY 3301
0306	F	11:00 - 11:50 pm	PHY 3301
0307	W	4:00 – 4:50 pm	PHY 0405

COURSE DESCRIPTION: This is the first semester of a three-semester sequence in introductory physics. The subjects covered will be mechanics and particle dynamics. This is a calculus based sequence, which makes extensive use of algebra, trigonometry, elementary geometry, and elementary calculus.

PREREQUISITES: Previous work in trigonometry, algebra and calculus, MATH 140. The course makes use of simple integration and differentiation as well as algebra and trigonometry. Co-requisite MATH 141.

HOMEWORK: There will be two types of homework assignments, those done on Masteringphics.com and those handed in during class. The Masteringphysics homework will be posted on Masteringphysics and those to be handed in during class will be posted on Blackboard. The first time you log on to masteringphysics.com you will need to enter the course id, which is "MPGOLDENBAUM83495". The problems on Mastering physics.com will be due at noon on Monday. The problems to be handed in during class will be due on Friday at the end of class. No homework will be accepted late. Homework on Masteringphysics will be graded by the computer. The homework handed in on Friday will be graded by a grader. Typically two problems will be assigned and one will be graded. This grade will be dependent on your problem solving technique as well as getting the correct answer.

Problem solving is an essential part of physics. **It is not possible to learn the subject without working through the problems.** There is a strong correlation between doing the homework and doing well on exams; although the grades on the homework only account for 20% of your final grade, you are unlikely to do well in the course if you do not take the homework seriously. The exams will contain problems from the homework as well as other problems.

QUIZZES: In order to test your progress and to encourage attendance quizzes will be given in the lecture period. The quizzes will be conducted using clickers.

EXAM: Three 50 minute midterm exams will given. In computing your grade only the two highest of the midterm exams will be counted. You must take the final exam to pass the course.

Hour exams:	Friday, Feb. 29
	Friday, Mar 28
	Monday, Apr 28
Final exam:	TBD

EXTRA HELP: I will be available after each lecture to answer questions and in my office on Wednesdays from 3 pm to 4 pm, or you may make an appointment for another time. The TAs will also have office hours. Free coaching for Physics 161 is also available from experienced volunteer physicists at the Slawsky Physics Clinic in PHYS 1208/1214 (hours to be posted on the door). You are encouraged to seek help at the first sign of difficulties.

GRADING: Your semester grade will be based on the following percentages:

Hour exams	30%
Quizzes	20%
Homework	20%
Final exam	30%

At the end of the semester all exam, etc. grades will be added with the above weighting and a final letter grade will be assigned depending on the distribution of total scores. In the

past typical grades/scores were: 86 ≤ A≤ 100, 76 ≤ B < 86, 50 ≤ C< 76, 40≤ D <50 and F(<40). This is only a guideline and not necessarily the grade distribution for this semester. Note that if you receive a grade of 100% on all the exams and do not hand in homework or take quizzess you will only have a score of 60%.

DISABILITY SUPPORT SERVICE: If you have a documented disability (from DSS) and wish to discuss academic accommodations, please contact me as soon as possible.

TIPS FOR DOING WELL:

1) Read the material in the textbook before and after the material is covered in lecture.
2) Freely ask questions in lecture and in discussion.
3) Work all of the homework problems. This is how you learn physics. You are allowed and encouraged to discuss homework with anyone you wish. However, in order to learn, you should initially make a serious attempt to solve the problems by yourself.
4) **Seek help immediately if you do not understand the material. The material is cumulative, if you fall behind you will have difficulty catching up.** If you have difficulty with the homework, try to analyze what is causing you problems. That is the first step towards better understanding. Ask for help. Don't wait until just before exams.
5) Remember that you are responsible for material discussed in class, including demonstrations, even if it does not appear in the textbook. You are also responsible for material in the text even if not covered in class.
6) Read the section of the text titled “To The Student”.

Honor Code

"The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit http://www.studenthonorcouncil.umd.edu/whatis.html."