

Physics 141.001 Introductory Physics I Mechanics and Heat Spring 2006

Text: *Physics*, 2nd ed., James S. Walker

Instructor: Dr. Matt Marone Room 112 Willet Science Center

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Office Hours: T 2:00-4:00 room 108, outside of these hours by appointment or e-mail

Lecture: section MW 3:00-4:15 Lecture Hall

Prerequisite: MAT 133 or equivalent

Co requisite: PHY 121L

General:

This is an algebra based class. Mathematics is the language of Physics and your ability to function in that language will affect your grade in this class. By the end of the class you will be able to solve problems and understand the concepts governing Newton's laws of motion, uniformly accelerated motion, work, energy, momentum, gravity and fluids. Lectures will be in an interactive format. I expect you to ask questions and I will ask questions as I am lecturing. You are not required to come to lectures, but your lack of attendance will most likely cause you to do poorly in the class. Should you have the lofty goals of attending a professional school, remember it is your responsibility to achieve a high grade in this class. I will not inflate your grade so that you can qualify for a scholarship or get into pharmacy/medical school. The responsibility is yours. Your final grade will only be determined by your performance on the tests or quizzes.

Grades:

A (90 and above), B+ (85-89), B (80-84), C+ (75-79), C (70-74), D (60-69) F (below 60)

Your Final class grade will be derived from the following percentages

Average of 4 Tests (65%)

In-class Quiz (15%)

Final Exam (20%)

You will **not** be graded on a “**curve**”.

Extra Credit will only be available on in class exams, **if** available at all.

Learning Style Audit: Each student is required to submit an Index of Learning Styles Questionnaire. The purpose of this test is to help students learn how to study better for this class. The learning style score will not be factored in to your grade, however failure to submit a score report will result in a grade of incomplete. You can find the learning styles questionnaire at the link shown below. Once you have filled out the form, you will see a results page. You are required to e-mail me the results. Your e-mail **must contain** “Phy 141 Learning Styles Scales” as the **subject**. If it does not have the correct subject, the mail filter will not file your results correctly. It is the responsibility of the student to confirm that the instructor received the audit. *You must submit the results before the first exam.*

<http://www.ncsu.edu/felder-public/ILSdir/ilsweb.html>

Electronic Submission of Assignments: *No e-mail with attachments will be accepted.*

Students bear sole responsibility for ensuring that papers or assignments submitted electronically to a professor are received in a timely manner and in the electronic format(s) specified by the professor. Students are therefore obliged to have their e-mail client issue a receipt verifying that the document has been received. Students are also strongly advised to retain a copy of the dated submission on a separate disk. Faculty members are encouraged, but not required, to acknowledge receipt of the assignment

Tests: Make-up exams will only be given to students with valid excuses as defined by the university handbook (illness, emergency, class trips with prior notification). The make-up exam may be harder or easier than the regular in-class exam. Any disputes concerning a test grade must be resolved within one week from the time the tests are returned or from the time the grades are made known to the class. Any grade disputes after this time limit **will not** be considered under any circumstances. Partial credit will be awarded depending how many steps were done correctly in a multi-step problem. The amount of credit will be at the discretion of the instructor. *No equation sheets are permitted.* A list of useful equations and constant will be provided with the test. You should learn all of the important equations and not rely on the equation sheet.

Quizzes: There will be a 5-10 minute quiz every week unless interrupted by a test. This quiz will cover any material discussed in class up to that point of time. Make-up quizzes are subject to the same conditions as make-up tests. The Quiz will usually be on Thursday. It may be necessary to change the day and the change will be announced.

Final Exam: The final exam may include **any** material discussed in class. Make-up exams will be subject to the same conditions as make-up tests.

Homework: Homework problems will be posted on a class web page. These problems will not be graded, but it is suggested that students work all the homework problems.

Honor code: You are bound by the Mercer honor code. The College's academic misconduct policy will be followed. All work, for which a grade is received, must be the **original** work of the **student** without aid or assistance of another party, or any printed and or electronic data/information. Academic misconduct cases will be referred to the honor council and the student will automatically receive a grade of incomplete (IC) pending a ruling by the honor council.

Cell Phone and Pager Usage: Out of courtesy for all those participating in the learning experience, all cell phones and pagers must be turned off before entering any classroom, lab, or formal academic or performance event

Classroom etiquette: You are expected to conduct yourself as a mature student, respectful of your classmates and instructor. You may be asked to leave the room if your behavior is disturbing the instructor or your fellow students.

Documented Disability Statement:

Students with a documented disability should inform the instructor at the close of the first class meeting. The instructor will refer you to the office of Student Support Services (SSS) for consultation regarding evaluation, documentation of your disability, and recommendations for accommodation, if needed. Students will receive from SSS the *Faculty Accommodation Form*. On this form SSS will identify reasonable accommodations for this class. The form must be given to the course instructor for signature and then returned to SSS.

To take full advantage of disability services, it is recommended that students contact the Office of Student Support Services, immediately. The office is located on the third floor of the Connell Student Center.

Material To Be Covered (Tentative)

Ch. 1 Introduction

Ch. 2 One-Dimensional Kinematics

Ch. 3 Vectors in Physics

Ch. 4 Two-Dimensional Kinematics

*****Test 1*****

Ch. 5 Newton's Laws of Motion

Ch. 6 Applications of Newton's Laws

***** Test 2*****

Ch. 7 Work and Kinetic Energy

Ch. 8 Potential energy and Conservative forces

Ch. 9 Linear Momentum and Collisions

Ch. 10 Rotational Kinematics and Energy

***** Test 3 *****

Ch. 11 Rotational Dynamics and Static Equilibrium

Ch. 12 Gravity

Ch. 15 Fluids

***** Test 4 Last week of class*****

Note: We will not cover every section of each chapter listed above. You will be informed of the relevant sections as we progress.

Important Dates to remember

Tuesday, January 17

Last day for late registration, drop/add, and to apply for the Georgia tuition grant

Friday, 24 March

Last day for withdrawal from regular classes