

**PHYS 1403: General Physics I  
Spring 2004**

**Professor:** Dr. Beth Ann Thacker  
Assistant Professor of Physics  
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**Schedule:** T 11:00am – 12:20pm  
W 12:00pm – 1:50 pm  
R 11:00am – 12:20pm

**Office Hours:** T 2:00pm – 3:30pm, W 11:00 – 12pm and 4:00pm-5:00pm, or by appointment.

**Prerequisites:** MATH 1320 and 1321.

**Course Materials:** All materials (modules, homework, readings and extra handouts) will be available in class.

**Course Coverage:** Kinematics, Forces, Torque, Work, Energy, Momentum, Rotational Motion, Waves, and Fluids.

**The Nature of the Course:** The course will be completely laboratory-based. (It will NOT be divided into Lecture and Laboratory. It is important that you understand this.) You will work through modules, learning content by doing experiments. Throughout the experiments there will be questions to guide you. The focus is on understanding the experiments and on learning to develop models of physical phenomena based on experimental evidence. It is the *process* that you go through in class that is important. You will answer the questions on the computer. You will have a record of your answers. There will also be times for discussion with other students and points at which the instructor will question you to determine your understanding up to that point. There will also be readings, exercises and homework.

**Participation:** Participation will count as 15% of your grade. If you come to class and participate each day, not coming late, not leaving early, being on task (working on the appropriate experiment), etc., you will receive the full participation grade. In addition, pre-tests, post-tests, journals, surveys, and questionnaires will count as part of your participation grade.

**Homework:** Homework will be assigned each week on Thursday and be returned the following Thursday. Homework will be turned in at the beginning of the class on Thursday. After the beginning of class it is late. Late homework will not be accepted, with the exception that you will be allowed to turn in one homework late. Other late homework will not be accepted. Homework will be graded and will count as 25% of your grade. It is an important part of the class.

**Pre-tests, post-tests and surveys:** A general pre-test and a survey will be given at the beginning of the semester and some sections will start with pre-tests. In addition, a general post-test, a survey and a class assessment questionnaire will be given at the end of the semester. There may be other pre-tests, post-tests or surveys. You may be required to do some of these outside of class. Pre-tests are to determine your understanding of a topic before instruction. Pre-tests and the general post-test will not be graded, but they will be counted as part of your participation grade. You will receive full credit, if you take the general pre-test, general post-test or complete the

surveys and questionnaires. Your participation grade will decrease by 3 percentage points for each general pre-test, general post-test, survey or questionnaire you don't complete and ½ percentage point for each section pre-test you don't complete.

**Journals:** Occasionally you may be asked to write a journal entry. Your instructor will give you a topic to write on. You may also use the journal to comment to the instructor about the class. Journal entries will be read, but not graded for content. Journal entries will count as part of your participation grade. You will get full credit, if you write the journal entry, and lose ½ a percentage point from your participation grade, if you don't.

**Project:** We will study one topic as a project outside of class. You will be given materials to work on outside of class. There will be questions to answer and turn in that will be graded. More information on the project will be given out in class. There will be times outside of class that you can, and should, talk with one of the instructors about material in the project. The project will count as 10% of your grade. It will be due on Monday, May 3, 2004.

**Quizzes:** There will be two quizzes on content and process covered in class, homework, readings and exercises up to that point. Quizzes will count 10% of your grade. The quizzes will be given on:

Quiz 1	January 29, 2004
Quiz 2	March 4, 2004

**Exams:** There will be two midterm exams and a final exam on content and process covered in class, homework, readings and exercises up to that point. Each midterm exam will count 10% of your grade and the final will count 20% of your grade.

Midterm exam 1	February 11, 2004
Midterm exam 2	April 14, 2004
Final Exam	Monday, May 10, 2004 4:30pm – 7:00pm

**Grades:** The grades will be distributed as follows:

Participation	15%
Homework	25%
Project	10%
Quizzes	10%
Midterm 1	10%
Midterm 2	10%
Final Exam	20%

Any student who because of a disability may require special arrangements in order to meet course requirements should contact the instructor as soon as possible to make any necessary accommodations. Student should present appropriate verification from AccessTECH. No requirement exists that accommodations be made prior to completion of this approved university procedure.