Physics 117 Physics I

Instructor
Thom Espinola
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Office Hours: Listed on my schedule, available on the class website or at
(http://class.guilford.edu/espinola/Espinola_F2016.html)

Class Time and Attendance
MWF 8:30-9:45 Frank 330
lab-- T 8:30-11:15 or T 2:30-5:15 Frank 330

Attendance at lecture is not strictly required; however, since students will be working in
groups they should plan on attending regularly. The college-wide attendance policy allows a
maximum of nine absences for a course meeting three times per week. The student is
responsible for all material covered in his or her absence. No makeup exams will be
available. Students may arrange to take exams early if necessary.

Website
All course information, including all course assignments with due dates, is available at the
course website (class.guilford.edu/physics/117).

Course Description
Physics 117 is the first semester of a two semester introductory physics sequence for
students with no previous physics background. An understanding of algebra, trigonometry,
and calculus is required. The first semester covers mechanics including energy,
momentum, angular momentum, and oscillations.

Text
Physics for Scientists & Engineers by Douglas Giancoli
The 2nd, 3rd, or fourth editions would be appropriate.

Students should also have a scientific or graphing calculator.
Course Objectives
The primary objectives of this course, in addition to following the five academic principles (see the link on the class website), are in order of increasing importance:
1. To introduce the student to the physics topics above and give him or her some understanding of their relevance to everyday phenomena and to his or her field of study.
2. To increase the student’s proficiency with the analytic and problem solving skills required by physics.
3. To help the student apply these skills to both physics and non-physics problems and so increase and deepen his or her understanding of everyday phenomena as well as his or her chosen field of study.

Grading
The final grade will be determined by the student’s performance on homework (45%), laboratory (25%) and three exams (10% each). I will use a 12-point grading scale. That is 92+ is an A; 88-92 is an A-; 84-88 is a B+; 80-84 is a B; 76-80 is a B-; 72-76 is a C+; 68-72 is a C; 64-68 is a C-; 56-64 is a D.

Homework: There will be nine units each including multiple choice, problems, and the bonus points for Previews. See the class schedule for due dates. There will be two extra credit homework units available.

Exams: There will be three exams. The first two exams will be given in lab on September 20th and November 1st and will each cover three units. The third exam will be given during the final exam period and will cover the last three units.

Collaboration and the Honor Code
Students are expected to work in groups on previews, homework, labs, and classwork; however, all materials submitted for grading must be the work of the individual student. All aid received, whether from students, reference materials, or any other source should be acknowledge. The instructor expects students to comply with the college’s Honor Code in all academic work. He will require the statement of testimony to be written only on the exams.

Availability of Student Accommodations
Guilford College complies with the Americans with Disabilities Act by providing a process for disclosing disabilities and arranging for reasonable accommodations. The policy may be found online. Ask your instructor or use the link provided on the class website for details of this process. Students wishing accommodation on an exam or other assignment must make the request at least one week in advance of the due date.
Time Required for This Class

According to the Guilford College Faculty and Student Handbooks, “credit units are assigned to courses on the ratio of one credit unit per semester for each three hours of consistent effort per week expected from the typical student.” This is a 4-credit class that requires a minimum of 12 hours of work each week from the student. About 6 hours weekly are spent in the class and lab sessions. Students are therefore expected to devote at least an additional 6 hours each week to assigned reading, writing assignments, research, the preparation of class presentations, and any required meetings with the instructor or teaching assistant. Some weeks will require that students spend more time on this course than in other weeks. Minimum passing performance should require approximately 6-8 hours per week of study time out of class. Average performance should require 8-10 hours per week. These hours are in addition to the 6 hours per week of in-class time.