PHY 166: INTRODUCTORY PHYSICS – Fall 2016

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Detailed description of this course available at professor’s web site:
http://www.lehman.edu/faculty/dgaranin

What is needed:
1) Textbook: Physics, Principles with Applications, by D. Giancoli (7th edition)
2) Online Home Work System: Mastering Physics (http://masteringphysics.com, see the
course code at professor’s web site)

You can buy a new textbook with Mastering Physics (http://www.amazon.com/Physics-
Principles-Applications-MasteringPhysics-
6th/dp/0321569830/ref=sr_1_4?ie=UTF8&qid=1296399380&sr=8-4) for about $200 or buy a
used textbook (even an older edition) and separately buy the mastering physics access for
PHY166 and PHY167 on the mastering physics web site (about $60). The second variant is
cheaper.

PHY166/168 and 167/169 are being taught during one semester as the first part of the two-
semester course of the Introductory Physics (the first 15 chapters in the Giancoli book).
PHY167 and PHY169 is the second part of this course (Chapter 16 and up), taught during
another semester.

PHY166 and PHY167 is the algebra-based course (without calculus) for the majority of the
students. PHY168 and PHY169 is the calculus based course for pre-engineering students and
physics majors. Be assured that mastering elementary algebra is an absolute requirement.

The course contains a lecture/demonstration/discussion session (two classes, 4 hours weekly)
and a laboratory session (1 lab, 2 hours weekly). Class participation is an essential component
of the course, attendance will be checked.

In particular, attendance at the weekly lab and turning in a satisfactory lab report on time is
required for a grade in the course. Lab reports are due at the beginning of the next lab session.
Students missing more than two labs will receive grade F for the course. If you missed a lab,
try to make up for it during the same week, before the lab setup has been dismantled.

Course objectives:
Upon completion of the course, students should be able to
• State and use appropriate concepts to solve problems in mechanics and thermodynamics
• Analyze and solve quantitative physics problems using algebra and trigonometry
• Use experimental apparatus to collect data
• Work as a team to analyze experimental data
• Prepare well-written lab reports in an appropriate format

Exams and grading:
There will be three midterm exams and a final. The final exam will be cumulative. There will be no makeup exams, except for documented emergency. You will be earning points for the following:

- Midterm exams: \[ 15 + 15 + 15 = 45 \text{ (max) (5 problems, 3 points each)} \]
- Final exam: \[ 25 \text{ (max) (5 problems, 5 points each)} \]
- Homework: \[ 10 \text{ (max)} \]
- Labs: \[ 20 \text{ (max)} \]

Total: \[ 100 \text{ (max)} \].

There will be no dropping lowest grades and “curving”. At the end the points will be converted into grades A, B, C, etc. according to the zone principle (say, A is 100-80 points, etc.). The zones are not fixed but will be chosen appropriately at the end of the semester.

Schedule of midterm tests (tentative):

- Test 1: Th, October 6
- Test 2: Th, November 10
- Test 3: Th, December 8