2013

140-01 Technical Physics

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Course Syllabus

Technical Physics
Phys 140-01, OT Students Only

Instructor Dr. Gregory Braun
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Office Hours Tuesday 2:00-3:00 is my one drop-in office hour. I am also usually on campus and can be available at the following times, but not necessarily in my office. I ask you to schedule ahead of time, so I can make a point of being available. Other times are also possible.

Tuesday 11:30 to 3:00
Thursday from 11:30 to 1:00
before or after my 1-3pm WF labs.


Learning Outcomes
• learning basic physics principles
• learning to think like a physicist, solving complex problems quantitatively
• explain the scientific method

Class Philosophy
Most of the basic learning you do in this course will be on your own. You learn the material by reading the book ahead of time, and practice problem solving by doing homework. You cannot count on the lecture to provide you with this basic understanding. The in-class portion of the course serves to build on and enlighten your basic learning. We will look at the material from a different viewpoint in class, as well as work on problems as a class and in groups. There
will be occasional quizzes, announced or not, to give you and me an idea of where you stand in your understanding.

Class attendance is required.

Grading: Four tests are worth 20% each. Homework and (pop) quizzes are each worth 10% of the final grade.

See also the Physics Department Grading Policy: http://www.xavier.edu/physics/About-the-Department.cfm

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All homework problems are to be turned in the class after we complete the chapter. They will be checked to see that they have been completed, and random problems will be graded. Please be neat in your homework assignments.

All exams must be taken. If an exam is missed and a legitimate written excuse is not provided a zero will be recorded. If an exam is missed and a legitimate written excuse is provided before the exam time, a make-up exam may be given. There will be at most one make-up exam.

Class attendance is required.

Chapters we hope to cover:
2 Describing Motion: Inertia
3 Projectile Motion
4 Newton's Laws
5 Circular Motion & Gravity
6 Energy & Oscillation
8 Rotation
9 Fluids
10 Temperature & Heat