

COURSE SYLLABUS -- Physics 1403-002, *General Physics I*, Fall, 2008

11:00am – 12:20pm Tuesday & Thursday, Science Room 007

Instructor: Dr. C.W. Myles, Professor, Dept. of Physics. **Office:** Sc. Rm 18. **Phone:** 742-3768.

Office Hours: 10am – noon + 3pm – 4pm MWF & *by appointment*.

Web Page: <http://www.phys.ttu.edu/~cmyles/>. **Email:** Charley.Myles@ttu.edu. A class email distribution list will be developed & we can have email discussions (homework, etc.). I make important class announcements by email! It is vital that I have your correct email address, that you check your email **DAILY** & that you tell me if you change email address!

Class Web Page: <http://www.phys.ttu.edu/%7Ecmyles/Phys1403/1403.html>. There, you can find: **1)** In Word format: Syllabus, Help Resources, Old Exams & Old Quizzes + Solutions. **2)** Class Lectures in Power Point Format. **3) MAJOR CLASS ANNOUNCEMENTS**. **4)** Links to Web pages for the text. **5)** Other items relating to this class. **PLEASE!** Get into the habit of checking this page often! TTU students can get Power Point & Word for **free or almost free!**

<http://www.phys.ttu.edu/~cmyles/Phys1306/PPT.txt> tells how.

Lab Co-Requisite: You **must be enrolled concurrently** in a section of 1403 (no-credit) Lab!

Textbook: *Physics*, by D.C. Giancoli (Prentice Hall). The 6th Edition is required!!!

Textbook Web site: http://wps.prenhall.com/esm_giancoli_physicsppa_6. This has many helpful items: Topical Outlines of chapters, Extra Problems & Exercises (with answers), Homework Problems (graded online!), Help resources, & discussions of **“What is Physics Good For?”**

Course Topics: Topics (selected), Chs. 1-12 of text. Detailed coverage announced as we go.

Course Objective: Survey of **1st semester Physics** (mechanics, waves). See separate list of Course Objectives (Learning Outcomes) for more details.

STUDENT RESPONSIBILITIES: *Attend as many classes as possible, come to class prepared, do the homework, read the material **BEFORE** I lecture over it, & keep up as we go along!*

Course Level/Math Level: This is algebra/trig based 1st semester physics. Math **pre-requisites:** Math 1320 (Algebra) & Math 1321 (Trig) or Math 1550 (Pre-Calculus) or equivalent. This isn't a math course. I won't have time to teach you math! **I must assume that you know it!** The course level is the standard introductory physics level. Major problems students have with it are its fast pace & the math.

Grades, Exams & TENTATIVE (!) Exam Schedule: **The Lecture Part of your Grade** is based on:

Exam I	20% of grade	Chapters 1-4	Week of Sept. 23
Exam II	20% of grade	Chapters 5-8	Week of Oct. 21
Exam III	20% of grade	Chapters 9-10	Week of Nov. 21
Final Exam	40% of grade	Comprehensive (incl. Chs. 11-12)	<u>Mon., Dec. 8, 4:30 - 7pm!!!</u>
Homework	20% of grade	On-line! (See discussion below!)	

Thursday Quizzes. Part of homework grade. Equal weight to one problem set. (See discussion below!)

Make-up Exams & Drop Policy: **NO MAKE-UP EXAMS WILL BE GIVEN!** (Exceptions: Medical problems with Dr.'s excuse & absences on official TTU business.) The lowest exam grade (excluding the Final!) will be dropped. If the Final is the lowest, it counts 20% instead of 40%. The quiz grade will **NOT** be dropped!

Homework: On-line homework problem sets will be assigned regularly. Problems will be worked & graded through the **Mastering Physics** website. Doing problems is the most effective means of learning physics, which is **impossible** otherwise! Once you are registered at **Mastering Physics**, you'll be able to download assignments. Assignments will be posted approximately once per week & will be due approximately one week later. You'll be able to get answers after the due date. **Pay attention to instructions on Mastering Physics about how homework is scored.** You may be able to find solutions to homework elsewhere. If so, try to solve a problem first without looking at the solutions. Copying solutions **will not** help you learn physics! Instructions on how to **access Mastering Physics** are on a separate sheet. This site is not at TTU, so you should give yourself plenty of time for submitting answers; sometimes the network can be slow or down.

Quizzes: To encourage attendance & try to prevent the large attendance decreases recently seen as the semester progresses, a short (~10 min.) **Quiz** will be given *the last part of class EACH THURS.*, with Physical Concept questions on & simple problems similar to those assigned. The quiz percent will be averaged with the homework grade & *will be equal in weight to one homework set.* Old Quizzes & Solutions are on the **Phys. 1403 Quiz Page:** <http://www.phys.ttu.edu/%7Ecmyles/Phys1306/quizzes.html>. **NOTE!!!** I've used on-line Homework only recently. Before this, Quizzes were longer. Current Quiz style/content are between old **Quizzes & Reading Quizzes:** <http://www.phys.ttu.edu/%7Ecmyles/Phys1306/rquizzes.html>. Try solving old **Quizzes BEFORE** looking at solutions. You **CAN'T LEARN PHYSICS** by copying solutions!

Attendance: I don't take roll & have no specific attendance policy. But, isn't it obvious that (unless you're a genius!) class attendance is required to get a good grade? The reason for the Quizzes is to encourage attendance. ***Skipping also costs money!*** TTU tuition & fees for full-time (Texas) students total for the lecture portion (3 hours) of this course costs about **\$27.13!** Each time you skip, you're "throwing away" **\$27.13!!** *After a while, this adds up!*

Lab Grade: The **Lab Grade** is calculated by your TA & is given to me at the semester's end.

Course Grade: The **Course Grade** is obtained from the **Lecture Grade** (80%) & **Lab Grade** (20%).

APPROXIMATE (!!!!!) Grade Scale: $100 \geq A \geq 90 \geq B \geq 78 \geq C \geq 66 \geq D \geq 54 \geq F \geq 0$
NOTE: *I reserve the right to slightly alter these cutoffs! I reserve the right to assign a higher grade to any student whose efforts may not be reflected in their total points. This decision is mine alone to make. You can't receive a lower grade than indicated by the total points.*

Study Groups: An effective strategy for learning physics & learning to solve problems is to form "study groups" to work homework together & to study for exams & quizzes together. **YOU'RE STRONGLY ENCOURAGED TO DO THIS! This is how most professionals work in "real life"!**

Hints: Many students find this course difficult & fast paced. Much dedication is needed to get a good grade (or better, to learn something!). If you have average intelligence & an adequate high school background, I suggest that you spend at least 2 - 3 hours outside for every hour in class (6 -9 hrs/wk!).

WHERE TO GO FOR HELP????????????!!!!!!

1. **See Me!!!** Room 018. During office hours or not (I'm usually not rigid about these). Or call me on the phone. Or email me! I respond to email!!!
2. **See your Physics Lab TA!!!** There will be office hours for this person. You can also see other TA's for help in TA Office, Room 4. A schedule will soon be posted for their hours.
3. **Get a tutor!!!** The Physics Department Office (Room 101) has an approved list.
4. **Fellow Students!!!** It is often a *very* effective strategy to work on homework assignments & to study for exams *together in a group*. I strongly recommend this! This is how people work in most professions! If you don't have friends in class, why not make some?
5. **Help Sessions!!** I'll try to arrange a weekly Help/Problem Solving sessions. Time & place TBA!
6. **Supplemental Instruction (SI) Sessions!** There will be SI sessions. Time & place TBA!
7. **The Internet!!!** There are **HUGE** numbers of Physics Help Web sites! Using Google & typing in "Physics Help" gives about 137,000,000 hits!!!! I encourage you to try out some of these on your own. On the last page is a list of some Physics Help Web pages.

BOTTOM LINE: *Numerous help resources are available. Please take advantage of them! If you need help and don't get it, you have no one to blame but yourself!*

IMPORTANT DATES: **Thurs., Aug. 28:** Last day to add. **Mon., Sept. 1:** Labor Day, **NO CLASSES!**
Wed., Sept. 10: Last drop date with full refund. **Mon., Sept. 22:** Last withdrawal from TTU with refund.
Mon., Oct. 27: Last drop date. **Wed., Nov. 26 – Sun., Nov. 30:** Thanksgiving Holiday, **NO CLASS!**
Wed., Dec. 2: Last class. **Mon., Dec. 8: FINAL EXAM!!** 4:30-7:00pm. **Mon., Dec. 15:** Grades are due!

ACADEMIC INTEGRITY: Academic dishonesty (cheating, etc.) will not be tolerated! Students caught in this type of behavior will be punished to the extent allowed by TTU. See Student Handbook or Catalogue.

EXAMS/QUIZZES: The exams & quizzes in this course are composed *uniquely* for this semester. In fact, previous exams & quizzes (& solutions!) are downloadable from the course web page!

COPYRIGHT STATEMENT: Exams, quizzes, & lecture notes related to this course are copyrighted & owned by me! Homework problems & solutions are copyrighted & owned by the text's author! Students in this course can freely download all of these from the course web page. ***No other reproduction or distribution is allowed!***

CLASSROOM CIVILITY: You are expected to assist in maintaining an environment which is conducive to learning. To assure that all have an opportunity to gain from class time, you are prohibited from using cell phones/beepers, eating/drinking in class, making offensive remarks, reading newspapers, sleeping or engaging in any form of distraction. This includes talking to others while I'm lecturing! Inappropriate behavior in shall result in, minimally, a request to leave class.

Bottom line: *You are expected to be courteous to me & to your classmates at all times!*

Any student who, because of disabling conditions, may require some special arrangements in order to meet the course requirements should contact the instructor as soon as possible so that necessary accommodations can be made. Proper documentation must be presented from the Dean of Students Office!

SOME PHYSICS HELP RESOURCES ON THE WORLD WIDE WEB

Note: The following list is **FAR FROM** exhaustive! Search the Web yourself and see what you find! When the email distribution list is complete, I'll send you this list, so it can be "hot linked" on your computer.

1. The Math and Physics Help Homepage:
<http://www2.ncsu.edu/unity/lockers/users/f/felder/public/kenny/home.html>
2. Physics Help and Math Help: <http://mytutor.topcities.com/>
3. Physics Help: <http://www.fortunecity.com/greenfield/eagles/180/>
4. Multimedia Physics Studios: <http://www.glenbrook.k12.il.us/gbssci/phys/mmedia/>
(Contains animated physics illustrations!!)
5. Physics Help of All Kinds: <http://www.trentu.ca/academic/physics/help/help.html>
6. Physicstutes: <http://www.launc.tased.edu.au/online/sciences/physics/tutes1.html>
7. The Physics Classroom: <http://www.physicsclassroom.com/>
8. The Physics Help Room: <http://helproom.physics.lsa.umich.edu/>