

COURSE SYLLABUS -- Physics 1403-001, General Physics I, Spring, 2008
9:00-9:50 MWF, Science Room 007

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

Office Hours: Just before or just after class, 10am – noon, M-F & *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: this 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 a tutor list & the textbook. 5) Other items relating to this class. **PLEASE!** Get into the habit of checking this Web page often! As TTU students, you 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 each chapter, 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 Course Grade** will be based on:

Exam I	20% of grade	Chapters 1-4	Week of Feb. 11
Exam II	20% of grade	Chapters 5-8	Week of March 10
Exam III	20% of grade	Chapters 9-10	Week of April 14
Final Exam	35% of grade	Comprehensive (incl. Chs. 11-12)	Mon., May 5, 4:30 – 7pm
Lab	15% of grade		
Homework	10% of grade	On-line! See discussion below!	

Friday 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 physics problems is the most effective means of learning physics, which is ***impossible*** without working problems! 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 after they are assigned. 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** will be given in the near future. This site is not at TTU & you should give yourself plenty of time for submitting answers; sometimes the network can be slow or down.

Quizzes: To encourage attendance & to try to prevent the large attendance decreases seen in previous semesters, especially on Fridays, a very short (~10 min.) **Quiz** will be given **EACH FRIDAY**, with questions on Physical Concepts & very simple problems similar to those assigned. **These will be averaged with your homework grade.** The overall quiz percentage will be averaged into the homework grade with and will be equal in weight to one homework set. Examples of my quiz style can be found on my **Physics 1403 Quiz Page** (<http://www.phys.ttu.edu/%7Ecmvles/Phys1306/quizzes.html>), where old Quizzes are posted, with solutions. **IMPORTANT!!! NOTE!!** Because of on-line homework, *the Quizzes will be shorter than my past quizzes.* They also may have questions on them similar to those on my past **Reading Quizzes**. Old **Reading Quizzes** can be found on my **Physics 1403 Reading Quiz Page** (<http://www.phys.ttu.edu/%7Ecmvles/Phys1306/rquizzes.html>).

APPROXIMATE(!!) Grade Scale: $100 \geq A \geq 88 > B \geq 76 > C \geq 64 > D \geq 54 > F \geq 0$
***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 how to solve problems is to form "study groups" to work homework together & to study for exams & quizzes together. **YOU ARE STRONGLY ENCOURAGED TO DO THIS!**

Attendance: I don't take roll & I have no specific attendance policy. However, isn't it obvious that (unless you are a genius!) class attendance is required to get a good grade? If attendance becomes a problem, I reserve the right to institute brief daily quizzes, to be added into the quiz grade.

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. **Your 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 will try to arrange a weekly Help and Problem Solving session. Time & place will be announced soon!
6. **Supplemental Instruction (SI) Sessions!** There may be SI sessions for this course. Time & place to be announced.
7. **The Internet!!!** There are **HUGE** numbers of Physics Help Web sites! Using Google.com & 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: Mon., Jan. 21: ML King Day, **NO CLASS!!** Wed, Feb 6: Last withdrawal date-partial refund. Wed, March 5: Mid-Semester. Wed, March 12: Last drop/withdraw date. Mon, March 17-Fri March 21: Spring Break, **NO CLASS!!** Mon, March 24: Easter Monday, **NO CLASS!!** Mon, April 28: Last class. Mon., May 5: Final Exam, 4:30-7:00 PM! I'll be out of town a few times. I'll try to get a substitute.

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: All exams, quizzes, & lecture notes related to this course are copyrighted & owned by me! The 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 will 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/>