PH1110 ONLINE College Physics I Su 10 – Trk A

Instructor: Mike Meyer mrmeyer@mtu.edu (906) 487-2273
Office Hours: 9:30-10:30 M,T,W, R or afternoons by arrangement.
(In person or by phone—a teleconference could also be arranged if necessary.)

Materials
Required Text: College Physics: Reasoning and Relationships Volume I, Nicholas J. Giordano © 2009
High speed internet access (available every day!) is also required.

Grading Policy
Your grade will be determined by your performance in the following 3 areas:
Participation (220 points total)
Prelecture/reading quizzes, in-class assignments and Discussion Board
Homework (WebAssign – 480 points total)
Exams (1100 points)
Exam #1-5/24 (300 pts), Exam #2-6/10 (350 pts), Final Exam – 6/25 (450 pts)

Participation (220 pts)
An on-line student’s participation grade is based on 3 things:

1) Pre-lectures (25 lectures, 5 points each, 3 “free” so 110 points total)
Each day we have “class” (Monday-Thursday) you will need to complete a pre-lecture quiz in BlackBoard (http://courses.mtu.edu) by 10:00 AM. (This could be done anytime after noon the day before.) Pre-lecture quizzes consist of 3 multiple choice questions and one essay question relevant to the reading for that day, followed a “problem poll” question in which you indicate which of the assigned problems from the previous day you’d like to see worked. Pre-lecture quizzes are worth 5 points each. A cushion of 10 points (two assignments) is allowed for technical difficulties or other issues that might keep you from submitting a few pre-lecture quizzes on time.

2) Lecture Videos
A streaming video of each class will be posted in BlackBoard (http://courses.mtu.edu) shortly before 1:00 PM, Monday-Thursday. There will be two video segments posted for each class. (For instance, the first class will have lecture #1a and lecture #1b). The idea is to watch the first segment, then complete the in-class activity, and then watch the second segment. At various points through the lecture, I will ask a “clicker” question of students in class. Physics education research shows that it’s important for you to take time to formally respond to these questions as well by writing down an answer, though this work will not be collected. You are absolutely welcome to pause and/or review parts of the video as you wish.

3) In-Class Assignments (25 lectures, 5 points each, 3 “free” – so 110 points total):
An in-class assignment will be posted with each lecture pair. The goal of this assignment is to get guided practice in the kinds of problems in the homework and on the exam. This assignment may be completed on your own or in a group and you can use the discussion board to ask questions (of me or of your classmates). The goal is to successfully complete it and learn by doing. For most of the activities, you will probably need to print the attached worksheet, complete it, and then scan/photograph it to submit as an attachment. You may prefer to complete the document in Word and resubmit in online, but be sure that you show all work! These assignments are also due by 10:00 AM the next class day (Monday through Thursday). Correctly completing and submitting each in-class activity is worth a total of 5 points. Again, a cushion of two assignments is allowed for technical difficulties or other issues that might keep you from submitting a few assignments on time.

4) Discussion Board Participation
To encourage use of the discussion board, every substantial posting you make (question or answer), earns back one participation point lost on pre-lecture or in class assignments. You may not earn more than 220 participation points total.

ADA Statement: Please contact me as soon as possible you have a disability that will require any accommodations during the semester. Reasonable accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and MTU guidelines.
Homework (WebAssign) (24 assignments, 20 points each, 480 points total)
“Practicing” physics is the best way to learn it. As such, there is significant homework. Homework counts as a substantial part of your grade. Your homework grade comes from doing end of chapter problems and submitting answers through an internet homework tool called WebAssign (www.webassign.net).

End of chapter problems listed on the calendar should be attempted BEFORE 10:00 AM each. A subset of these problems (which are boldfaced) must be done (and will be graded) in WebAssign. Beware! Your problems in Webassign may have numerical values different from the book and from other students; you are welcome to just work problems directly in WebAssign first if you wish—however, my solutions and all discussion board postings will use numbers from the textbook which we all have in common.

The last problem of the pre-lecture quiz is a chance to list problems you’re struggling with. Shortly after 10:00 AM, I will check which questions you’d like help with, and create solutions. I’ll post my solutions to the most requested problems in BlackBoard by early afternoon. Using my solutions, the discussion board or other resources, you are expected to get all questions answered during the afternoon and evening and finish up the homework by 10:00 AM the next day.

These deadlines are meant to keep you on pace. There is lots of material in the course, and if you don’t keep up, the course will almost certainly “get away from you.” If you expect you will have issues meeting deadlines, please contact me in advance to work things out!

WebAssign grades problems automatically, and allows me to grade typed answers (for conceptual questions) manually. The specifics of accessing/using WebAssign are available at: 
http://www.phy.mtu.edu/~mrmeyer/webassign-s04

Late homework, prelecture quizzes, or in-class assignments kind will not be accepted unless you contact me in advance OR I receive an excuse via e-mail from the Dean of Students office, appropriate coach, or faculty advisor. If you know that you will miss an assignment, please contact me by e-mail at least one day in advance to make arrangements to submit work.

Exams 
Exam #1 (300 pts) –Monday 5/24
Exam #2 (350 pts) –Thursday, 6/10
Final Exam (450 pts) –Friday June 25

If you are on campus, we will arrange a time that is convenient for all other on campus student on these days, and I will proctor your exam.

If you will be away from campus, you will need to arrange for a proctor to be present for your exams. More information about appropriate proctors can be found on the techonline page: http://www.techonline.mtu.edu/student_services/proctor.htm

Proctors must have access to e-mail (to receive the exam from me) and to either a scanner or fax (to return the exam to me for grading). Proctor forms and information must be scanned/e-mailed to me no later than 5/17 so that I have adequate time to contact your proctor prior to the exam.

All exams will be open book, open note, and contain essay questions and multiple choice problems. Exam 2 will focus on material covered since Exam 1. The final exam is comprehensive with an emphasis on untested material. Exams should be taken within a 12 hour period—between 9:00 AM and 9:00 PM EDT on the dates listed above. Be sure that your proctor is available during these intervals. Except for extreme geographic circumstances, exams will not be given at alternate times without an excuse from the dean of students, faculty advisor, or coach.

Approximate Grading Scale
Overall grades will be assigned with the approximate cutoff points as follows:
A  1620  B  1440  C  1260  D  1080
AB 1530  BC 1350  CD 1170  F  <1080
I reserve the right to adjust these cutoffs downward, but will not adjust them upward.
My expectations
The summer course is very intense. We “meet” an equivalent of 6 contact hours each week, and I expect that you will spend close to 3 hours outside of class for each contact hour. This means you should plan on at least 20-24 hours/week on this course. Many students find it takes more time during some of the more difficult material.

This system seems complicated, but it has worked very well for students who use it. An example schedule for the first week goes like this:

Prior to Monday, May 10, 10:00 AM
- Read the assigned text (Chapter 1, section 1-7)
- Complete the pre-lecture quiz in BlackBoard by 10:00 AM on 5/10

Between 10:00 AM on 5/10 and 10:00 AM on 5/11
- Watch the first 15-20 minute segment of the video lecture (Lecture #1a)
- Complete and submit in-class assignment #1
- Watch the second segment of the video lecture (Lecture #1b)
- Attempt to work the assigned problems for Tryby 5/11 (See calendar) from the book and in Webassign and make a list of those you’re unable to finish.
- Read the assigned text for 5/11 (Sections 1.8, 2.1, and 2.2)
- Complete the 5/11 pre-lecture quiz, which includes a chance to request problem solutions from Tryby 5/11.

Between 10:00 AM on 5/11 and 10:00 AM on 5/12
- Use posted solutions (early afternoon) and the discussion board to finish Tryby 5/11.
- Watch the first 15-20 minute segment of the video lecture (Lecture #2a)
- Complete and submit in-class assignment #2
- Watch the second segment of the video lecture (Lecture #2b)
- Attempt to work the assigned problems for Tryby 5/12 (See calendar) in Webassign and make a list of those you’re unable to finish.
- Read the assigned text for 5/12 (Sections 2.3-2.6, 3.1)
- Complete the 5/12 pre-lecture quiz, which includes a chance to request problem solutions from Tryby 5/12.

Between 10:00 AM on 5/12 and 10:00 AM on 5/13
- Use posted solutions (early afternoon) and the discussion board to finish Tryby 5/12.
- Watch the first 15-20 minute segment of the video lecture (Lecture #3a)
- Complete and submit in-class assignment #3
- Watch the second segment of the video lecture (Lecture #3b)
- Attempt to work the assigned problems for Tryby 5/13 (See calendar) in Webassign and make a list of those you’re unable to finish.
- Read the assigned text for 5/13 (Sections 3.2-3.6)
- Complete the 5/13 pre-lecture quiz, which includes a chance to request problem solutions from Tryby 5/13.

The cycle continues from here. Note that even though all assigned questions and problems will not be graded through WebAssign, all are important in terms of preparing for exams.

Online Learning
An online course puts a greater burden on you to seek out help when you need it. I will be available by e-mail and in person, and the physics learning center usually has limited summer hours for those on campus.

I assign homework to give you practice working problems so that you are ready for the exams. I give prelecture quizzes to encourage reading and in-class assignments to check your understanding and progress. Doing these things well is like practicing for a recital or training for a marathon. You may find a way to cut corners, but if you don’t do these things well, exams will show it.

It is not my intention to “get” anyone; my role is both to help you with your study of physics as much as I can AND to judge your progress objectively. I give you opportunities to ask questions about most assignments before they are due—but you need to be ready to ask. If you get “stuck”, you need to seek help as soon as possible, either from a friend or acquaintance that has taken physics, or from me. The online format and rapid pace of this course makes getting “unstuck” in a timely fashion even more important than usual! Keep the lines of communication open, and we’ll have a great semester.