

Physics 2020
Elements of Physics II, Spring 2008

Instructor: Dr. David Murdock, Bruner 221, [372]-3044. E-Mail: murdock@tnitech.edu

Course Web page: <http://iweb.tnitech.edu/murdock/ph2020/ph2020.html>

Textbook: *College Physics (A Strategic Approach)*, Knight, Jones and Field.

You also need to buy the paperback 2020 lab book for the course and an access card for the WebAssign homework system.

Class Times: MWF 10:10pm – 11:05 pm, Bruner 224.

Exam dates: (Locations to be announced)

Exam I: Feb. 21, 7pm–9pm, Location TBA

Exam II: Apr. 3, 7pm–9pm, Location TBA

Exam III: Apr. 30, 1pm–3pm, Location TBA

Grade Weighting:

Lab: 20%, Homework: 15%, Quizzes: 15%, Exam I: 15%, Exam II: 15%, Exam III: 20%

A minimum of 60% of the lab points will be required in order to pass the course.

Grade Scale:

80–100: A 68–79: B 56–67: C 45–55: D 0–44: F

Lab Sections begin meeting during the week of January 21. The first meeting is an introduction to the lab.

Every week you need to do the pre-lab questions before coming to the lab.

Attendance: Class attendance is not *required* except for quizzes, exams and the labs, but you are responsible for knowing about all announcements made in class. The lectures cover the topics which will be on the exams and quizzes, and many worked examples will be given.

Office Hours: Liberal; I am in my office (or teaching courses) most of the time from 10 am to 6 pm, and usually at night, from 8pm to 10pm. (See my schedule on my web page.) See me for help in working the problems, questions about the quizzes and exams, etc.

I have an “open-door” policy for giving help. If I am in my office, I *will* provide help on homework problems regardless of how busy am (or appear to be). If the door is closed, please knock!

Other members of the Physics Dept faculty can also provide help.

Homework: Each week, about 10 problems will be assigned *individually* to students using a web-based system which assigns, grades and records homework. I will probably give “hints” for working these, accessible from the course web page (under **Hints**). Start working on them early, but don’t stare at any one problem for hours! See me for help.

The answers will usually be due on the Friday of the week at 8am. Again, don’t do these sets at the last minute. The grade of one HW set will be dropped in computing the final grade.

Quizzes, Exams: There will be at least four quizzes, with the lowest score to be dropped.

The quizzes are in general a bit easier than the test questions and I will provide you with the most important equations on all of them. (This will also be done on the exams.) The point of this is to convince you that memorization plays a small role in learning physics.

Quizzes are usually announced at least a week before they are given. Exams are given on the dates and times listed in the syllabus; the locations will be announced about a week before each exam.

More Help: The course web page has a link to **On-line Material**, which includes scanned keys of past quizzes and exams given for this course.

Reading Assignments in *College Physics*:

Chapter	Subject Matter	Sections Covered
Chap. 17	<i>Wave Optics</i>	17.1–17.2, 17.5–17.6
Chap. 18	<i>Ray Optics</i>	18.1–18.7
Chap. 19	<i>Optical Instruments</i>	19.1, 19.3
Chap. 20	<i>Electric Forces and Fields</i>	20.1–20.7
Chap. 21	<i>Electric Potential</i>	21.1–21.5, 21.7–21.9
Chap. 22	<i>Current and Resistance</i>	22.1–22.6
Chap. 23	<i>Circuits</i>	23.1–23.5, 23.7
Chap. 24	<i>Magnetic Fields and Forces</i>	24.1–24.6
Chap. 25	<i>EM Induction and EM Waves</i>	25.1–25.8
Chap. 28	<i>Quantum Physics</i>	28.1–28.7
Chap. 29	<i>Atoms and Molecules</i>	29.1–29.8
Chap. 30	<i>Nuclear Physics</i>	30.1–30.6

WebAssign Homework System

We will use *WebAssign* homework system. Here's what you need to do during the first week of classes:

- Buy a WebAssign access card at bookstore; these aren't on the shelf, you have to go to the front and ask for one. Follow the directions written on it to register with the system. Here's the information you need to have:

The name of your institution is **tnitech**. Your user name is a lower case string consisting of your first two initials and your *full* last name. For example, I would be **dpmurdock**. This is similar to the convention used for TTU's student E-mail addresses, except without the "21" attached to the end and the fact that long names are *not* cut off as they are on the E-mail addresses.

Initially your password is set to be the same as your *full* social security number (with no hyphens). You can change it later on.

If there is any problem with registering, tell me as soon as you can, by E-mail if necessary. Of course, describe what you did and where the problem came up.

- Do the first homework assignment. The first homework is just a set of very easy questions, and is intended only for you to show that you can do homework with this system. It won't count for the grade.
- If you have not registered and done the first problem set by 8am on Jan 21, 2008 I will seek you out to ask what the problem is.