# Physics 2010 (NSCC, Cookeville) Elements of Physics I, Fall 2007

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

My main job is at TTU and I spend most of my time there. This may be inconvenient for NSCC students, but I will always provide help to students if they come and see me there.

# Course Web page:

http://iweb.tntech.edu/murdock/ph2010/ph2010.html

# My Teaching page:

http://iweb.tntech.edu/murdock/teaching.html

**Lectures:** MW 2:00 – 3:40 pm, NSCC 207.

Textbook: Physics, 7<sup>th</sup> ed., Cutnell and Johnson (2007)

#### Exam dates:

Exam I: Sept. 28, 2007 Exam II: Nov. 2, 2007

Exam III: Dec. 7, 2007 10am-12noon (?)

# Grade Weighting:

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

# Grade Scale:

80–100: A 68–79: B 56–67: C 45-55: D 0–44: F (Cut-offs to be adjusted downward as I deem appropriate.)

**Lab Sections:** Labs will meet on Fridays, from 10am to 12noon. (In NSCC lab room). Lab is taught by Dr. Tim Dean of NSCC/TTU. Dr. Dean says he may be able to accommodate other times for the lab.

**Attendance:** NSCC's attendance policy is followed: A student is expected to attend all scheduled classes and laboratories. A student who misses class for two consecutive weeks without contacting the instructor or who violates the instructor's stated attendance policy will be administratively withdrawn form the course and given a grade of "WF".

Office Hours: Liberal; I am in my office at TTU (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!

**Homework:** About 8 problems will be given out weekly on Wednesday, due the following Wednesday.

Quizzes, Exams: There will be at least three quizzes (I don't plan to drop the lowest score). Be sure to take all the quizzes.

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 above. (Locations will be announced if they are not in 207 or the lab room.)

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.

Material Covered: Here is the list of subjects and the corresponding chapters in the textbook, in the order that we'll do them. We'll do what time permits and we may not get up to the last couple chapters:

Subject	Chapter	Sections of CJ7 Covered
Intro and Math Review	Chap. 1	1.1 - 1.9
Kinematics in One Dimension	Chap. 2	2.1 - 2.8
Kinematics in Two Dimensions	Chap. 3	3.1 - 3.3,  3.5
Forces and Newton's Laws	Chap. 4	4.1 - 4.13
Circular Motion	Chap. 5	5.1 - 5.8
Work and Energy	Chap. 6	6.1-6.8,6.10
Momentum	Chap. 7	7.1 - 7.6
Rotational Kinematics	Chap. 8	8.1 - 8.6, 8.8
Rotational Dynamics	Chap. 9	9.1 - 9.7
Simple Harmonic Motion	Chap. 10	10.1 - 10.4, 10.9
Waves and Sound	Chap. 16	16.1-16.3,16.5,16.7-16.9,16.12
Interference Phenomena	Chap. 17	17.1 - 17.6, 17.8
Fluids	Chap. 11	11.1 - 11.10, 11.12
Temperature and Heat	Chap. 12	12.1 - 12.8, 12.11
Ideal Gas Law and Kinetic Theory	Chap. 14	14.1 - 14.3, 14.5
Thermodynamics	Chap. 15	15.1 - 15.13

Nashville State complies with the Americans with Disabilities Act. If you wish to request any special accommodations for any courses in which you are enrolled, contact the Campus Assistant Director, Joan Christopher at 520-0551 ext. 103. Such services must have proof of documentation that is not over three years old.