Physics 4900
Topics in Modern Physics, Fall 2011

Instructor: Dr. David Murdock, Bruner 221, [372]-3044 (Office)
E–Mail: `MURDOCK` (That is, `murdock@tntech.edu`)

WWW page: `http://iweb.tntech.edu/murdock/ph1100/ph1100.html/`

Open office hours!

Meeting Time: MWF, 9:05–10:00am, Br 224. That's when everyone wanted it.

Textbook: Griffiths, D J, Introduction to Elementary Particles. First edition 1988; there is a second edition which was put out in 2002 but for our purposes and if you wnat ot save money the 1s edition will be OK.

Prerequisites: I will assujme that everyone in the class has finished the 2110-2120 sequence and has *taken* a course at the level of our Modern Physics.

Course requirements: 5 or 6 problem sets, mostly for Griffiths' book. At least three quizzes and *maybe* a very short report on some topic in particle physics.

Grading: 40% of grade based on the exams. 30% from the problem sets. 15% from the project. 15% for attendance. For the sake of completeness, I will quote percentages for which I will *guarantee* the following grades:

A: 80%–100%, B: 65%–80%, C: 50%–65%, D: 30%–50%.

but I will adjust the cutoffs downward if I see fit!

Attendance: Since material will come from the lectures attendance is strongly encouraged! Attendance at videos will probably be required.

Topics: The Standard Model of Particle Physics, as much as one can do without getting into field theory (or even QM calculations). We will pay a lot of attention to the relativity chapter in the book.

The Point of All This: To gain an appreciation of the state of modern theories of the fundamental particles.

Students with a disability requiring accommodations should contact the Office of Disability Services (ODS). An Accommodation Request (AR) should be completed as soon as possible. The ODS is located in the Roaden University Center, Room 112; phone 372-6119.

Should normal classroom activities be disrupted by a flu outbreak, students will be given new instructions for the course via E-mail.