

Physics 3306, Electricity and Magnetism II, Spring 2013

Instructor: Prof. Wallace Glab **E-mail:** wallace.glab@ttu.edu

Office: SC 26, 742-3776 **Office Hours:** MWF 9:30-10:30 am, TT 2:30–3:30 pm

Class: TT 11:00 a.m. – 12:20 p.m. SC 103

Class Webpage: www.phys.ttu.edu/~gglab/3306_s12.html

Required textbook: *Electromagnetic Fields*, by Roald K. Wangsness, 2nd. ed., Wiley. We will be covering Chapters 12-? in this course. Find it in the bookstore or at Amazon used if you don't already have one.

Strongly recommended: A good book of mathematical fun facts with integral tables. A good choice is my favorite, *Tables of Integrals and Other Mathematical Data*, by Herbert Bristol Dwight. This is ancient, but available through Amazon. There are many others.

Topics covered: Currents, magnetic forces, magnetic fields, magnetic potentials, magnetism in matter, electrodynamics, driven AC circuits, radiation, waveguides.

Assessment: Student progress will be assessed through homework, quizzes and exams performance. The goal is to not fail the class.

Homework: There will be a number of homework assignments that will be collected, graded, and returned with helpful comments.

Quizzes: There will be a total of roughly 8 quizzes that will be given in class (typically on Fridays). These should last, optimistically, about 15 minutes. They are meant to see if you have been keeping up, and will involve no hairy calculations.

Exams: There will be a midterm exam and a final exam. The midterm will be given some evening at a mutually agreed time, so you will be able to take two hours to work on it. The final will be at the time listed for our class meeting time, Wednesday, 12/14, 10:30 am - 1:00 pm. You will be able to refer only to your Wangsness and math fun facts books during the exams.

Grading: Grading will occur. The breakdown of percentages assigned to each category of work for the calculation of your final grade will be: Homework average, 20%; Quiz average 20%; Midterm 30 %; Final 30%. The preliminary grade scale is

A: 86 and up; **B:** 85-74; **C:** 73-62; **D:** 61-52

- Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor's office hours. Please note instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, you may contact the Student Disability Services office in 335 West Hall or 806-742-2405.

