PHYS 2063 Wave Physics Fall 2022

This course will discuss oscillations and waves in physical phenomena. The (not so hidden) agenda will be to show you how you can apply mathematics, most of which you already have covered, to better appreciate what you learned in your introductory physics courses.

INSTRUCTOR:	Jim Napolitano	email: tuf43817@temple.edu
	Office Hours: Wednesdays 1-3pm in SERC 416	
TEACHING ASST:	Wesley Deeg	email: wesley.deeg@temple.edu
WEB PAGE:	https://www.cst.temple.edu/ tuf43817/PHYS2063/	
MEETINGS:	SERC 456	Tue 11:00-12:30, Thu 11:00-12:30

I will not be closely following any textbook. The notes you take in class will be your primary reference. Please get notes from another student if you are unable to make it to class.

A detailed course outline is posted on the course web page. The outline refers to two textbooks. One is *The Physics of Vibrations and Waves, 6e* (Wiley 2005) by H. J. Pain, which you can find online or in the bookstore. The other is a textbook I am preparing on mathematical concepts in physics, for which I'll give you a bound hard copy.

Homework assignments are posted on the course web page. Homework is due at the start of each class, unless there is an exam on that day. You can turn in your homework on Canvas, or on paper during class time.

I urge you to collaborate with classmates on the homework. You are welcome to use your book or other materials for the exams, but you must work them on your own. A final exam will be given at the assigned time during finals week.

I also urge you to learn how to use MATHEMATICA for manipulating equations and making plots, and to use LaTeX for preparing your homework. Links are provided on the course web page to help you get started.

GRADING POLICY

Your course grade will be determined by the homework (25%) and midterm exams (25% for each). Cutoffs for course grades A, B, and C are 90%, 80%, and 70%, respectively. I expect to make some use of "grade modifiers", that is $\pm$ after the grade. I may make other adjustments to the overall grading scheme if there are special circumstances.

LEARNING OUTCOMES

This course will teach you about the intimate connection between basic mathematics and physical phenomena and their interpretation in terms of fundamental laws of nature.

ACADEMIC INTEGRITY STATEMENT

Put simply, don't copy someone else's homework, and don't cheat on the exams. If I suspect you of either, I will ask for an explanation. If your explanation is unsatisfactory, you will be given a grade of zero and reported to the College. If this happens more than once, you will be given an F for the course.