Syllabus

People:

Prof. Raymond Frey  | rayfrey@uoregon.edu (mailto:rayfrey@uoregon.edu)  | web page (https://pages.uoregon.edu/rayfrey/)  | Wil 462

TAs: Abhijeet Melkani, Haidar Esseili

Classes:

TuTh  12:00 - 1:50 pm, PSC B040

Office hours:

• Frey (Wil 462): Tues 3-4:00 and Weds 11-12:00
• TAs: TBD

Course Objectives:

We will investigate some of the important implications and applications of the full Maxwell equations. We will also study special relativity. This material corresponds to Chapters 8-12 of Griffiths. If time permits, we will include a brief overview of general relativity.

Textbook:

Griffiths, Introduction to Electrodynamics, 4th Ed. Available from the Duck Store or elsewhere in print or as an e-print.

Course assignments:

• Homework. We will have (typically) weekly homework assignments, typically due on Thursdays. Normally, each problem will be given 10 points. Unless announced otherwise, assignments are to be turned in at the start of class on the due date. Solutions will be provided. You are encouraged to work on your homework with other students in the class. However, what you turn in must be your own work.
• Pre-flight quizzes. Canvas quizzes based on the textbook reading to be carried out prior to class. Typically these will precede the Tuesday classes.
• In-class quizzes. Typically on Tuesdays and based on the most recently turned-in homework.
• Class engagement. Attendance is important. We will do some small-group cooperative work on problems during class.
• Exams: A midterm and a final exam. Exams will be closed book and no notes. Useful information will be provided for the exams and provided beforehand.
Default class pattern:

- Tuesday: pre-flight quiz on new material; in-class quiz on previous homework; lecture on new material; in-class problem solving/group work
- Thursday: homework due; lecture on new material; in-class problem solving/group work

Grading:

- Homework: 30%
- Class engagement and pre-flight quizzes: 10%
- In-class quizzes: 10%
- Midterm exam: 20%
- Final exam: 30%

You can monitor scores in the Canvas grade book.

Late policy: Unless excused in advance, late homework will be assessed a penalty of 10% for each late day.

Exams:

- Midterm Exam: TBD
- Final Exam: Thur June 13, 08:00-10:15 (maybe we can move it ??)

General UO Policies:

(https://canvas.uoregon.edu/courses/205622/pages/university-policies) University Policies (https://canvas.uoregon.edu/courses/205622/pages/university-policies) on accessibility, accommodations, academic misconduct, mental health, reporting, etc.