Sabancı University
Faculty of Engineering and Natural Sciences

Fall Semester 2022-2023

PHYS 411 – PHYS 511

ELECTROMAGNETIC THEORY I

Instructor: Durmuş Ali Demir (Room: 1089, Ext. 7042, durmus.demir@sabanciuniv.edu)

Teaching Assistant: Solomon Samuel (solomon@sabanciuniv.edu)

Text: J. D. Jackson, “Classical Electrodynamics”


PHYS 411-511 Course outline:

1) Basic electrodynamic variables
2) Vector calculus
3) Maxwell’s equations – general.
4) Electric field.
5) Magnetic field.
6) Electromagnetic waves (phase, group and wave front velocities).
7) Wave guides.

Grading

Grades will be based on homeworks, 2 take-home midterm examinations, and 1 in-class final examination.

Midterm take-home exams … 20 + 25 %
Final exam ………….. 40 %
Homeworks ………….. 15%

Class hours
Monday 11:40-13:30 (FENS L029)
Tuesday 08:40-09:30 (FENS L027)

Office hours:
Monday 10:40-11:30