

PHYSICS 504 Spring 2025

ELECTRICITY & MAGNETISM II (Course Info)

Room: ARC-204

Time: Monday, 12:10-1:30 pm

Thursday, 12:10-1:30 pm

Instructor: Sergei Lukyanov

office: Serin E364

office phone: (848) 445-9060

e-mail: sergei@physics.rutgers.edu (preferred)

Office hours: Friday 10:00 am-12:00 pm

Extra meetings can be held by appointment.

The main reference texts: (1) The first part of the course “Special Relativity with the basics of relativistic Field Theory” is based on the lecture notes which follows the spirit of L.D. Landau and E.M. Lifshitz, “The Classical Theory of Fields”, Volume 2

(2) The second part of the course “Application of Classical Electrodynamics” is mostly based on J.D. Jackson “Classical Electrodynamics”, 3rd edition

Additional texts: A. Zangwill, “Modern Electrodynamics”, 1st edition

H.Goldstein, C. Poole and J. Safko, “Classical Mechanics”, 3rd edition

Homework: (1) There will one homework per 1-2 weeks.

(2) Late homework **will not be accepted**.

The absolute cutoff time for homework is 7 pm due date.

(3) Ideally, solutions should be typed (in LaTeX), but handwritten solutions are acceptable as long as they are clearly written.

I'll not accept sloppy solutions.

(4) Homeworks will be graded and give 100% of final grade.

Exams: There will be midterm (March 3 (???)) and final (exam period May 8-14) exams.

Students with Disabilities: If you have a disability, it is essential that you speak to the course supervisor early in the semester to make the necessary arrangements to support a successful learning experience. Also, you must arrange for the course supervisor to receive a Letter of Accommodation from the Office of Disability Services