

# Electromagnetic Theory

## PHY213B

(draft, currently updated, March 5, 2022)

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<https://canvas.eee.uci.edu/courses/44620>

Lectures (48425): TTh 11:00-12:20pm

Discussion (48426): F 10:00-10:50am

Final (June 7): 10:30-12:30 (a plan)

Textbook: J. Jackson, "Classical Electrodynamics" 3<sup>rd</sup> ed.

(Class starts on March 29 and ends on June 2, 2022; Final plans on June 7)

Class Outline:

Chap. 1: EM waves

A. Maxwell's Equations in plane geometry (Chap.7)

B. Plasma waves (Jackson Chap. 7)

Chap. 2: Waveguide modes

(Jackson Chap. 8)

Chap. 3: Radiations-----

(Jackson Chaps. 13, 14)

Chap.4: Special Theory of Relativity

(Jackson Chap. 10)