

STATE UNIVERSITY OF NEW YORK
New Paltz, New York.

Electricity and Magnetism
Course No. PHY313 (3 credits)
Fall 2024

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Text

Introduction to Electrodynamics (fifth edition) by David J. Griffiths.

Course Description

The following topics will be covered in this course.

- Electrostatics (Chap. 2).
- Potentials (Chap. 3 and numerical solutions.).
- Magnetostatics (Chap. 5).
- Electrodynamics (Chap. 7).
- Electromagnetic Waves (Chap. 9).

Evaluation

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|-------------|-----|
| First exam | 30% |
| Second exam | 30% |
| Final exam | 40% |

Problems for Home Work

Chap. 2 – 1, 4, 6, 7, 8, 17, 18, 22, 23, 26, 29, 35, 36.

Chap. 3 – 1, 2, 15, 21.

Chap. 5 – 2, 3, 4, 9, 11, 14, 18.

Chap. 7 – 7, 16, 24, 25.

Chap. 9 – 9, 10.

Administrative Addenda

Student Learning Outcomes

To acquire skills in the mathematical analysis of problems in electromagnetism using vector calculus and differential equations.

Campus-Wide Policies

<https://www.newpaltz.edu/acadaff/academic-policies-including-academic-integrity/>

Deadlines

<http://www.newpaltz.edu/events/academic.php>