

# Physics 425 - Electromagnetism I

## Dr. Ian Balitsky, Fall 2025

### 1. Information:

- Office: OCNPS 323
- Phone: 757-683-5814.
- E-mail address: IBalitsk@odu.edu
- Office hours: Wed 1:00-2:00 p.m. in PLC and 2:00-3:00 in the office

### 2. Textbook:

- D.J. Griffiths - Introduction to Electrodynamics, 5th ed. (Cambridge University Press) - chapters 1-6.

### 3. Reference Textbook:

- W. Greiner - Classical Electrodynamics, ISBN 9781108420419

### 4. Grade (out of 100%):

- Homework: 34%
- Midterm 1: 16%
- Midterm 2: 16%
- Final (comprehensive): 34%

### 5. Outline of the course:

- Vector Analysis
- Introduction to Electrostatics
- Boundary-Value Problems in Electrostatics
- Electric Fields in Matter
- Magnetostatics

- Magnetic Fields in Matter

6. Course Requirements:

- HW assignments must be handwritten or printed in Latex (screenshots from the solutions which you may find online are not acceptable).
- Midterms and final exam are open-book but use of electronic devices (cell phones, tablets, laptops) is not allowed.