

# Physics 604 - Classical Electrodynamics I

## Dr. Ian Balitsky, Fall 2020

### 1. Information:

- Office: OCNPS 323
- Phone: 683-5814, 269-7383 (JLab)
- E-mail address: IBalitsk@odu.edu
- Office hours: TBA

### 2. Textbook:

- J.D. Jackson, *Classical Electrodynamics*, 3rd ed., (John Wiley and Sons, 1998) - chapters 1-5.

### 3. Reference Textbooks:

- D.J. Griffiths - Introduction to Electrodynamics, 3rd ed.
- W. Greiner - Classical Electrodynamics.
- Landau and Lifshitz, The Classical Theory of Fields

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

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

### 5. Outline of the course:

- Introduction to Electrostatics
- Boundary-Value Problems in Electrostatics
- Boundary-Value Problems in Curvilinear Coordinates
- Multipoles and the Electrostatics of Macroscopic Media
- Magnetostatics