

Physics 804 - Classical Electrodynamics II

Dr. Ian Balitsky, Spring 2022

1. Information:

- E-mail address: IBalitsk@odu.edu
- Office hours: TBA.

2. Textbook:

- J.D. Jackson, *Classical Electrodynamics*, 3rd ed., (John Wiley and Sons, 1998) - chapters 6-9, 11.

3. Reference Textbooks:

- D.J. Griffiths - *Introduction to Electrodynamics*, 3rd ed.
- W. Greiner - *Classical Electrodynamics*.

4. Grade (out of 100%):

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

5. Outline of the course:

- Electrodynamics: Maxwell equations and conservation laws
- Plane electromagnetic waves and wave propagation
- Wave guides and resonant cavities
- Radiating systems, multipole fields and radiation
- Special theory of relativity