

# Physics 334

## Intermediate Electricity & Magnetism - Sp16

**Lecturer: Distinguished Professor Godfrey Gumbs**

**Office: 1247N; Phone #: 650-3935**

**E-mail: ggumbs@hunter.cuny.edu**

**Web page: <http://www.hunter.cuny.edu/physics/faculty/gumbs/home>**

**Text:** The course will follow Robert H. Good, Classical Electromagnetism (Edition, Thomson)

**Lectures:** Monday & Thursday: 2:10-4:00, PM

**First Mid-Term Quiz:** Monday, March 7, 2016 in 1311HN

**Second Mid-Term Quiz:** Monday, April 18, 2016 in 1311HN

**End-Term Exam (Cumulative):** Set by the Registrar

**Problem Sets:** Roughly every other week. Solutions will either be posted or we will discuss the solutions in class.

### Tentative Outline

1. Vector Analysis: Chapter 1.
2. Electric & Magnetic Fields: Chapters 2 & 3.
3. Electromagnetic Induction: Chapter 4.
4. Maxwell's equations: Chapter 5.
5. Energy and Potentials: Chapter 6.
6. Dipoles & Multipoles Analysis: Chapter 7.
7. Conductors: Chapter 8.
8. Dielectrics: Chapter 9
9. Maxwell's Equations with Materials: Chapter 11.

Last class is on Monday, May 16, 2016. There will be a total of about twenty-seven lectures.

Please note:

- Colloquium on Friday February 5 at the University of South Florida.
- Monday February 15: Presidents Day - College closed.
- American Physical Society March Meeting: March 13-15.
- 22 - 30 April: Spring Recess.
- Thursday 9 April: Reading Day.

Grades Computed as Follows

First Midterm: 20%

Second Midterm: 20%

Final Exam: 60%

TOTAL 100%

OFFICE HOUR: THURSDAY : 1:00-2:00 PM

*"In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical and/ or Learning) consult the Office of AccessABILITY located in Room E1124 to secure necessary academic accommodations. For further information and assistance please call (212- 772- 4857)/TTY (212- 650- 3230)."*

*Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty.*

*The college is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.*