

ELECTRICITY AND MAGNETISM II**MWF 2:10-3:00 pm in 230 AJM**

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Texts: Introduction to Electrodynamics, 3rd edition, by Griffiths D. J.

Web: <http://solar.physics.montana.edu/qiuj/phys318>
Frequently check this page for detailed course schedules, reading assignments, homework problems and/or solutions.

Prerequisite: Phys317 or equivalent (E&M I)

Homework: 1-2 problems will be given for each class, due at the next class. Answers will be distributed 2 days after due. Group discussions are encouraged, but you must turn in your own homework.

Exams: There will be three in-class exams. The final exam is comprehensive and will be given at **8:00-9:50 on Friday, May 9, in AJM 230.**

Grading: Midterms: 45% (= 15% x 3)
Final exam: 30%
Homework: 25%

Outline:

PART I: magnetostatics (Chap 5): Lorentz force, current, Biot-Savart Law, Ampere's law, and magnetic vector potential.

PART II: magnetism in matter (Chap 6).

PART III: electrodynamics (Chap 7): emf, induction, Maxwell's equations.

PART IV: electromagnetic waves (Chap 9).