

## Syllabus PHYS 218 Spring 2008

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**Office Hours:** M-W-Th 2:00-4:00p or by appointment

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**Text book:** DON'T PANIC Vol. II by William H. Bassichis (5th Edition)

**Problems:** All problems and exercises in each chapter

**Exams:** 2/12, 3/18, 4/15; 7:00-9:30pm; HELD 105, 107, 109, 111, 113, and 200

**Final Exam:** 5/5, 10:30am-12:30pm

| Week            | Topic  |
|-----------------|--|
| Jan. 14-18      | Mechanics Review, Chap. 1 Vectors and Newtonian Mechanics, Electric Charge and Coulomb's Law |
| Jan. 21-25      | Chap. 2 The Electric Field   |
| Jan. 28-Feb. 01 | Chap. 3 The Electric Potential   |
| Feb. 04-08      | Chap. 4 Gauss's Law – Derivation   |
| Feb. 11-15      | Chap. 5, 6 Application of Gauss's Law, Capacitors  |
| Feb. 18-22      | Chap. 7 Current, Ohm's Law   |
| Feb. 25-Feb 29  | Chap. 8 Joule's Law, EMF and Simple Circuits   |
| Mar. 03-07      | Chap. 9 The Magnetic Field   |
| Mar. 10-14      | Spring Break   |
| Mar. 17-21      | Chap. 9 The Magnetic Field (ctd.)  |
| Mar. 24-28      | Chap. 10 The Source of $\vec{B}$ , Ampère's Law  |
| Mar. 31-Apr. 04 | Chap. 11 Induced EMF and Inductance  |
| Apr. 07-11      | Chap. 11, 12 Induced EMF and Inductance, AC Circuits   |
| Apr. 14-18      | Chap. 12 AC Circuits (ctd.)  |
| Apr. 21-25      | Chap. 13 Maxwell's Equations and Electromagnetic Waves                                       |
| Apr. 28         | Review   |