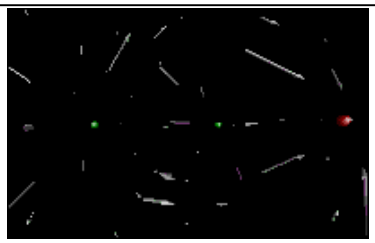
physics.syr.edu/courses/PHY212.98Summer/
Last modified: Tue Aug 4 20:48:22 1998

PHY 212 - General Physics II

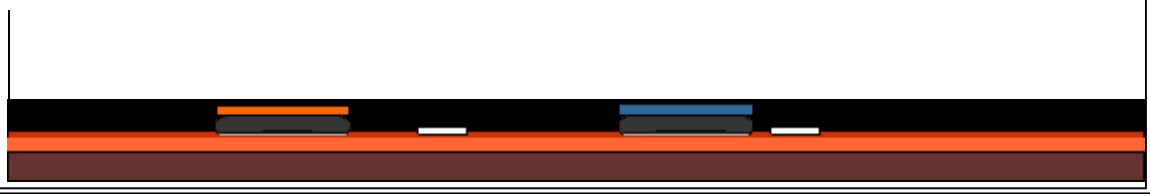


VRML Gallery of Electromagnetism

- **Rob Salgado (Instructor and Recitation Leader)**
  257 Physics Bldg
  443-5967, fax 443-9103
  salgado@physics.syr.edu

- **Use the Mail-form**

- Homework
- EXAM 4: (Chapters 13 - 17)
  Choose one time:
  THU 1:00-2:20am (in B129E)
  THU 3:00-4:20pm (in 257)
  FRI 8:00-9:20am (in 257)
  FRI 10:00-11:20am (in B129E)
  No time extensions for late-comers



PHY 212 - STAFF

CLINIC HOURS  (none for summer)

<table>
<tr><td>  </td><td>Rob Salgado
(PHY 212 Instructor and Recitation Leader)
257 Physics Bldg (x5967)
salgado@physics.syr.edu
(or use the FORM below)</td><td>Lecture</td><td>MTWTh
9:30 - 11:00
(B129E)</td></tr>
<tr><td></td><td></td><td>Discussion</td><td>MTWTh
11:00 - 11:50
(B129E)</td></tr>
<tr><td>  </td><td>Abdou Abdel-Rehim
(PHY 222)
411 Physics Bldg (x3978)
abdou@physics.syr.edu
(or use the FORM below)

Clinic Hours:</td><td>Laboratory</td><td>M W
2:30 - 4:30
(110)</td></tr>
<tr><td>  </td><td>Regina Jones
(Undergraduate Secretary)
111 Physics Bldg (x1915)
jones@physics.syr.edu
(or use the FORM below)</td><td colspan="2"></td></tr>
</table>

Send Email to Rob-Salgado

Your Name:

Your Email:

Subject: -PHY 212

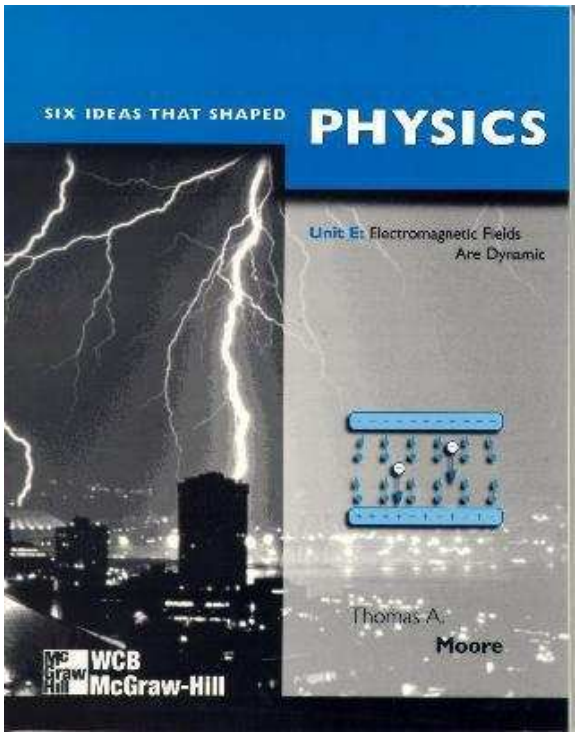
PHY 212 textbook

Six Ideas That Shaped Physics

by Thomas A. Moore

published by WCB/McGraw Hill, 1998

unit E
Electromagnetic Fields Are Dynamic



Typos
Instructors' Discussions

Supplementary textbooks I recommend:

- **Conceptual Physics** by Hewitt (Great explanations!)
- **Fundamentals of Physics** by Halliday/Resnick/Walker (good examples)
- **Physics** by Halliday/Resnick/Krane (Update of a classic!)
- your **Calculus** book! (Yes, we will use calculus.)
- **The Physics Problem Solver** by REA (worked problems)
- **Lectures on Physics** by Feynman/Leighton/Sands (Advanced. Great explanations!)

These are available in the Physics library.

Last modified: Mon Jun 22 14:17:20 1998

PHY 212 - Introduction

PHY 212 is an introductory calculus-based course in Electromagnetism: the study of electricity, magnetism, and light.

- **prerequisites: MAT 285 or 295 and PHY 211**
- **co-requisites: MAT 286 or 296**

This course moves quickly.
If you are having trouble, slow me down and ask questions.
Please do not fall behind.

> **Announcements, Homework assignments, Homework solutions, and Lecture notes will be made available through this website. Check it frequently.**

This course will some feature innovative experiments in physics-education

- **encouraging collaborative discussions:**
  PHY 212 Discussion Board
- **visualizing with Virtual Reality:**
  VRML Gallery of Electromagnetism
- **learning with Java Applets:**
  Java Applets for Electromagnetism
- **video demonstrations:**
  All You'll Ever Need to know about... The Right Hand Rule

Your comments on these experiments are strongly encouraged.

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salgado@physics.syr.edu

PHY 212/222 Syllabus

Meeting times:

(* REVISED *)

- (LEC) LECTURE with ROB: MTWTh 9:30am-11:00am (B129E)
- (REC) RECITATION with ROB: MTWTh 11:00am-11:50pm (B129E)
- (LAB) LABORATORY with ABDOU: M W 2:30pm- 4:30pm (110)

Calendar:

1998
SUMMER-SESSION II
July 1 - August 8

Sun	Mon	Tue	Wed	Thu	Fri	Sat
JUN		30				
JUL			1	2		
	6	7	8	9	[10 cancel]	
	13	14	15	16		
	20	21	22	23		
	27	28	29	30		
AUG	3	4	5	6	7	

Schedule:

212 LECTURE	222 LAB
(TUE 30 Jun) Basic Electrostatics (pt 1) (WED 1 Jul) Basic Electrostatics (pt 2) (THU 2 Jul) Electric Fields	(WED) 2 ELECTROSTATICS
(MON 6 Jul) Fields and Currents (TUE 7 Jul) LEC only: ** EXAM 1 (10am-11:20am) (WED 8 Jul) Voltage (THU 9 Jul) Simple Circuits (FRI 10 Jul) (Cancel)	(MON) 3 COMPUTER LAB (WED) 4 ELECTRIC POTENTIAL
(MON 13 Jul) Analyzing Circuits (TUE 14 Jul) *Capacitors and Energy (pt 1) (WED 15 Jul) *Capacitors and Energy (pt 2) (THU 16 Jul) LEC only: ** EXAM 2 (10am-11:20am)	(MON) 6 DC CIRCUITS (WED) 7 RC CIRCUITS
(MON 20 Jul) Magnetic Fields (TUE 21 Jul) Magnetic Forces on Currents (WED 22 Jul) Currents Create Magnetic Fields (THU 23 Jul) Field Equations and Gauss' Law	(MON) 8 MAGNETIC FIELDS (WED) 5 GAUSS
(MON 27 Jul) Curl and Ampere's Law (pt 1) (TUE 28 Jul) Curl and Ampere's Law (pt 2) (WED 29 Jul) LEC only: ** EXAM 3 (10am-11:20am) (THU 30 Jul) Applications to Static Fields	(MON) 9 AMPERE
(MON 3 Aug) *Finding Maxwell's Equations (TUE 4 Aug) Induction (WED 5 Aug) *Electromagnetic Waves (THU 6 Aug) *EM Waves Carry Energy (FRI 7 Aug) LEC only: ** EXAM 4 (10am-11:20am)	(MON) 10 FARADAY

This page is maintained by Rob Salgado salgado@physics.syr.edu