


## PHY212-GeneralPhysicsII

- **RobSalgado** (InstructorandRecitationLeader)  
257PhysicsBldg  
443-5967, fax443-9103  
salgado@physics.syr.edu

- Use the  Mail-form



# . Relax


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FOR YOUR VIEWING PLEASURE

- The Cross -Product (McNamara [Syracuse])
- The Right -Hand Rule
- VRML Gallery of Electromagnetism
- Motion of Charged Particles (Taiwan)
- DCCircuits [University of Guelph]

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- Try out the PHY212 Discussion Board



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[Physics Courses](#)

[Physics Department](#)

[Syracuse University](#)

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Since May 26, you are visitor number

002043

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*salgado@physics.syr.edu*

# PHY212-STAFF

## CLINIC HOURS none for summer)

	<p><b>Rob Salgado</b>          (PHY212 Instructor and Recitation Leader)          257 Physics Bldg (x5967)  <a href="mailto:salgado@physics.syr.edu">salgado@physics.syr.edu</a>          (or use the FORM below)</p>	<b>Lecture</b>	MTWTh 8:30-10:00 (PB104)
		<b>Recitation</b>	MTWTh 10:00-11:00 (PB104)
	<p><b>Badis Idri</b>          (PHY212/222 Grader and Recorder)          406 Physics Bldg (x5982)  <a href="mailto:idri@physics.syr.edu">idri@physics.syr.edu</a>          (or use the FORM below)</p> <p>Clinic Hours:</p>		
	<p><b>David Delphenich</b>          (PHY222 Lab Instructor)          243 Physics Bldg (x3920)  <a href="mailto:delpheni@physics.syr.edu">delpheni@physics.syr.edu</a>          (or use the FORM below)</p> <p>Clinic Hours:</p>		
	<p><b>Regina Jones</b>          (Undergraduate Secretary)          111 Physics Bldg (x1915)  <a href="mailto:jones@physics.syr.edu">jones@physics.syr.edu</a>          (or use the FORM below)</p>		

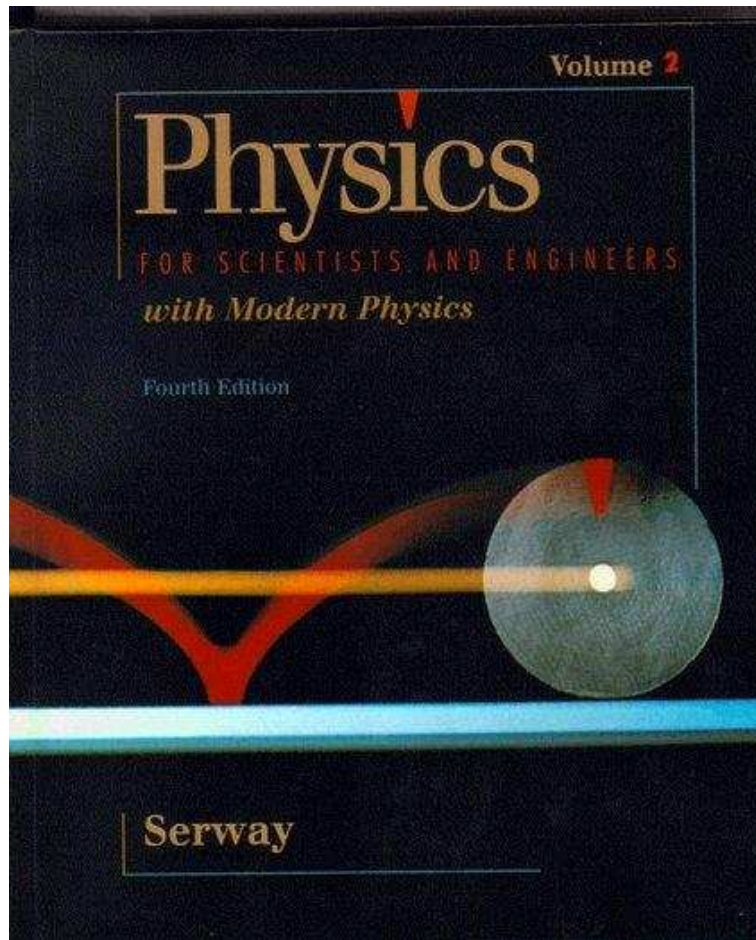
Send Email to

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# PHY212TEXTBOOK

volume2  
of  
**PhysicsforScientistsandEngineers(withModernP hysics)**  
4thedition  
byRaymondA.Serway

publishedbySaundersCollegePublishing, 1996



The textbook has finally arrived.

(Ideally, we would have used Volume 2 of the PHY21 1text.  
However, the publisher does not have it ready yet.  
Our text is a slightly-more advanced version.)

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## 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.

## PHY212-Introduction

**PHY212 is an introductory calculus-based course in Electromagnetism: the study of electricity, magnetism, and light.**

- prerequisites: MAT285 or 295 and PHY211
- co-requisites: MAT286 or 296

**This course moves quickly.**

**If you are having trouble, slow med 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.**

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**This course will some feature innovative experiments in physics- education**

- emphasizing "HOW you get to the answer"
- encouraging collaborative discussions:  
PHY212 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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# PHY212Syllabus

## Meetingtimes:

- LECTURE with ROB: MTWTh 8:30am-10:00am (subject to revision)
- RECITATION with ROB: MTWTh 10:00am-11:00am (subject to revision)
- LAB with DAVID: M W 2:30pm- 4:30pm (subject to revision)

## Calendar

1997  
SUMMER-SESSION II  
July 1 - August 8

July							August						
Sun	Mon	Tue	wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2										
	7	8	9	[10]			[4]	5	6	7	[8]		
	14	15	16	17									
	[21]	22	23	24									
	[28]	29	30	31									

## July1-July3

(NoclassTHUJuly3-UniversityHoliday)

### TUE-July1

- (23)ElectricCharge(Franklin)
- (23)ElectricForceonanElectricCharge(Coulomb)

### WED-July2

- (23)ElectricVectorField

### THU-July3

- (Holiday)

## July7 - July11

(EXAM1onTHUJuly10)

MON-July7

- (23)ElectricVectorFieldII
- (skim24)ElectricFlux(Gauss)  
(Wewillreturntoitlater.ItisnotonExam1.)
- [Lastdaytoadd,lateregister,changegradingoptionfor6-weekSessionIIclasses.]

TUE-July8

- (25)ElectricPotentialEnergy
- (25)ElectricPotential

WED-July9

- Recitationonly
- (NOLECTURE:Robisoutoftown)
- [LastdaytodropSessionIIclassesforfullrefund.]

THU-July10

- **EXAM1(forJuly1thruJuly9material:Ch23andCh25)**
- (Robreturns.)

FRI-July11

- (NOCLASS)
- youcanpickupyourextamsfromRob

## July14-July17

MON-July14

- (26)ElectricEnergyStorage:Capacitance

TUE-July15

- (27)CurrentandResistance
- (28)ElectricCircuits:resistivecircuits

WED-July16

- (28)ElectricCircuitsII:RCcircuits

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THU-July17

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- (29)Nomonopoles(preludetoGauss)
- (29)MagneticForceonanElectricCharge(Lorentz)

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## July21-July24

(EXAM2onMONJuly21)

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MON-July21

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- **EXAM2(forJuly14thruJuly16material:Ch26,27,28)**

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TUE-July22

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- (30)MagneticVectorFieldI:(Biot-Savart,Ampere)

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WED-July23

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- (30)MagneticVectorFieldII:(Ampere,Ampere-Maxwell)

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THU-July24

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- (24)ElectricFlux(Gauss)
- (30)MagneticFlux(Gauss)

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## July28-July31

(EXAM3onMONJuly28)

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MON-July28

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- **EXAM3(forJuly17thruJuly24material:Ch24,29,30)**

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TUE-July29

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- (31)MagneticInduction(Faraday)

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WED-July30

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- (32)MagneticEnergyStorage:Inductance
  - (32)ElectricCircuitsIII:RLcircuits,LCcircuit s
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THU-July31

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- Superconductivity
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## August4-August8

(EXAM4onFARADAY:August4)

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MON-August4

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- **EXAM4(forJuly28thruJuly31material:Ch31,32 )**
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TUE-August5

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- (34)TheMaxwellEquations
  - (34)ElectromagneticOscillations(Maxwell,Hertz)
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WED-August6

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- (35)LawsofGeometricOptics
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THU-August7

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- REVIEW
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FRI-August8

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- **CUMULATIVEFINALEXAM(Ch23-35,exclude33)**
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