PHYS212 COURSE SYLLABUS

Spring, 2015

INSTRUCTOR: Dr. Muruges Duraisamy

OFFICE:	Lewis 226
OFFICE HOURS:	3.30-4.30pm Tues & Fri (by appointment)
OFFICE PHONE:	915-5622
E-MAIL ADDRESS:	duraism@phy.olemiss.edu
COURSE PAGE:	http://www.phy.olemiss.edu/~duraism/phys212.html
CLASS HOURS:	9:00-9:50 pm (MWF) Lewis Room 101(Auditorium)

Course Description:

This course is an introduction to electromagnetism and optics. Topic includes the study of static and moving charges and the electric and magnetic fields that they generate, simple circuit analysis, and Ray/Wave optics.

The Text:

The required text book is Physics for Scientists and Engineers-Part II, 9th Ed. By Serway and Jewett

Grading Plan:

Coursework will be weighted as follows:

Weekly Homework (10-12 Sets)	20%
Exam 1	15 %
Exam 2	15 %
Exam 3	15 %
Class Quiz	5%
Final Exam	30%

Grading Type:

The numerical grade (out of 100) will be converted to a letter grade according to the UM +/-grading system found at http://www.olemiss.edu/info/grading.html

Grades	Numerical points	GPA
Α	> (or =) 90	4.0
A-	[87,89]	3.7
B +	[84,86]	3.3

В	[80,83]	3.0
В-	[75,79]	2.7
C+	[71,74]	2.3
С	[65,70]	2.0
C-	[60,64]	1.7
D	[56,59]	1
F	< 55	0

Online Homework:

The WebAssign online testing system provides online homework and grading. Access and do the homework problem online at <u>http://webassign.net/</u>.

Important note: You must self-enroll, the class key for **Physics 212 is : olemiss 6102 1358**, please supply your entire student Id accurately in order for the system to transfer credit from Webassign to Blackboard.

TENTATIVE CLASS SCHEDULE: This is a tentative syllabus and a slight adjustments might be made.

Week	Date	Day	Chapter/Topic	Reading Assignment
1	Jan 21	W	L1:Introduction, CH 23	23.1-23.2
	Jan 23	F	L2: CH23	23.3-23.4/HW 1
2	Jan 26	М	L3:CH23	23.5
	Jan 28	W	L4:CH23	23.6-23.7
	Jan 30	F	L5:Gauss's Law, CH24	24.1-24.2/HW2
3	Feb 02	М	L6: CH24	24.3
	Feb 04	W	L7: CH24	24.4
	Feb 06	F	L8: Electric Potential, CH25	25.1-25.2/HW3
4	Feb 09	М	L9: CH25	25.3-25.5
	Feb 11	W	L10: CH25	25.6-25.8
	Feb 13	F	L11:Capacitance, CH26	26.1-26.3HW4
5	Feb 16	М	MidTerm-EXAM 1	
	Feb 18	W	L12: CH26	26.4-26.5
	Feb 20	F	L13:CH26	26.6-26.7/HW5
6	Feb 23	М	L14: Current and Resistance ,CH27	27.1-27.3

	Feb 25	W	L15: CH27	27.4-27.6
	Feb 27	F	L16: Direct-current circuits, CH28	28.1-28.2/HW6
7	Mar 02	М	L17: CH28	28.3
	Mar 04	W	L18: CH28	28.4-28.5
	Mar 06	F	L19: Magnetic Fields, CH29	29.1-29.3
8	Mar 09	М	SPRING BREAK	
	Mar 11	W	SPRING BREAK	
	Mar 13	F	SPRING BREAK	
9	Mar 16	М	L20: CH29	29.4-29.6
	Mar 18	W	L21:Sources of Mag.Field, CH30	30.1-30.3
	Mar 20	F	L22:CH30	30.4-30.6/HW7
10	Mar 23	М	Mid-Term Exam II	
	Mar 25	W	L23:Faraday's Law, CH31	31.1-31.3
	Mar 27	F	L24: CH31	31.4-31.6/HW8
11	Mar 30	М	L25: Inductance, CH32	32.1-32.3
	Apr 01	W	L26:CH32	32.4-32.6
	Apr 03	F	L27:AC-circuits,CH33	33.1-33.4/HW9
12	Apr 06	М	L28: CH33	33.5-33.7
	Apr 08	W	L29:CH33	33.8-33.9
	Apr 10	F	L30:Ray Optics, CH35	35.1-35.3/HW10
13	Apr 13	М	MID EXAM III	
	Apr 15	W	L31: CH35	35.4-35.5
	Apr 17	F	L32: CH35	35.6-35.8/HW11
14	Apr 20	М	L33: Image Formation, CH36	36.1-36.3
	Apr 22	W	L34: CH36	36.4-36.5
	Apr 24	F	L35: CH36	36.6-36.8/HW12
15	Apr 27	М	L36: Wave Optics, CH37	37.1-37.3
	Apr 29	W	L37: CH37	37.4-37.6
	May 01	F	L38: Review	38.1-38.3
16	May 05	М	FINAL EXAM 8.00 am to 11.00 am	

Academic Integrity Statement:

As an Olemiss student I have abided by the UM academic integrity policy as described in Policy Code ACA.AR.600.001 <u>https://secure4.olemiss.edu/umpolicyopen/ShowDetails.jsp?</u> <u>istatPara=1&policyObjidPara=10817696</u> and <u>http://conflictresolution.olemiss.edu/m-book/</u>

Attendance Policy:

All students are required to be present for all class meetings.

Students With Disabilities:

If you have a disability requiring an accommodation, please contact the Office of Student Disability Services (SDS) at 234 Martindale Center (<u>sds@olemiss.edu</u>) phone: 662-915-7128

Doing well in Physics :

1. Come to class on time (< 10 minutes late is understandable)

2. Read the "Mathematical review" in the Appendices. Specially read vectors and calculus sections.

3. Write down the examples on the board in class

4. Work through examples in the text and assignments

5. Strongly encouraging work with other students. Keep in mind, your homework must be your own.

6. Note down the points that are not clear, and ask questions in class or later

7. Come to office hours if you have questions