

PHYSICS 721 SYLLABUS

Fall, 2014

INSTRUCTOR: Dr. Muruges Duraisamy

OFFICE: Lewis 226
OFFICE HOURS: 10:00a.m.-11:00 a.m Tuesday and Thursday
OFFICE PHONE: 662-915-5622
E-MAIL ADDRESS: duraism@phy.olemiss.edu

COURSE PAGE: <http://www.phy.olemiss.edu/~duraism/phys721.html>
CLASS HOURS: 08:00am-9:15 pm (T, TH) Lewis Room 104(Tutoring Lab)

Course Description:

This course is the first course of a two- course sequence on advanced electromagnetic theory. Topics includes electrostatics and Magnetism, boundary value problems, multipoles and Maxwell's equations.

Textbook:

Classical Electrodynamics (3rd Edition) by J.D. Jackson

Suggested references:

Classical Electricity and Magnetism:(2nd Edition) by Wolfgang K. H. Panofsky (2005)

Classical Electrodynamics by Walter Greiner (1998)

Introduction to Electrodynamics (3rd Edition) by David J. Griffiths (1999)

Mathematical Methods For Physics by H. W. Wyld (1999)

Mathematical Methods for Physicists (7th Edition) by George B. Arfken (2012)

Homework

The weekly homework assignments are due on Mondays. Late submissions are not accepted. Homework solutions that have been copied from online sources are easily detectable and strictly forbidden. The offence will result in zero credit for that homework.

Mid-Term Exams

Two mid-term exams will be conducting lecture hours as specified in the syllabus. All exams are closed book . There will be no make-up exams.

Final Exam

The final exam is scheduled for Tuesday, December 9th, 8:00a.m-11:00a.m. Attendance is compulsory.

Grading Plan:

Coursework will be weighted as follows:

Homework (8-10)	30%
Exam 1	20 %
Exam 2	20 %
Final Exam	30%

Grading Type:

Whole Letter Grade (A-F). Grade ranges are

Grade	Total
A	87-100 %
B	86--75%
C	74-62%
D	61-50%
F	<49 %

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

Week	Date	Day	Chapter/Topic	Reading Assignment
1	Aug 26	T	L1: CH1	1.1-1.4
	Aug 28	TH	L2: CH1	1.5-1.7
2	Sep 01	T	L3:CH1	1.8-1.9
	Sep 04	TH	L4:CH1	1.10-1.11
3	Sep 09	T	L5: CH2	2.1-2.2
	Sep 11	TH	L6: CH2	2.3-2.5
4	Sep 15	T	L7: CH2	2.6-2.7
	Sep 18	TH	L8: CH2	2.8-2.9

5	Sep 23	T	L9: CH2	2.10-2.11
	Sep 26	TH	L10: CH3	3.1-3.2
6	Sep 29	T	L11: CH3	3.3-3.4
	Oct 01	TH	L12: CH3	3.5-3.6
7	Oct 07	T	EXAM I	
	Oct 09	TH	L13: CH3	3.8-3.9
8	Oct 14	T	L14: CH3	3.10-3.11
	Oct 16	TH	L15: CH3,CH4	3.12, 4.1
9	Oct 21	T	L16: CH4	4.2-4.3
	Oct 23	TH	L17: CH4	4.4-4.5
10	Oct 28	T	L18: CH4, CH5	4.7, 5.1-5.2
	Oct 30	TH	L19: CH5	5.3-5.5
11	Nov 04	T	L20: CH5	5.6-5.8
	Nov 06	TH	L21:CH5	5.9-5.11
12	Nov 11	T	L22:CH5	5.12-5.15
	Nov 13	TH	L23: CH6	6.1-6.4
13	Nov 17	T	EXAM II	
	Nov 20	TH	L22: CH6	6.5-6.8
14	Dec 02	T	L23: CH6	6.9-6.11
	Dec 04	TH	L24: CH6	6.12-6.13
15	Dec 09	T	FINAL EXAM 8.00 am -11.00 am	

Academic Integrity Statement:

As an Olemiss student I have abided by the UM academic integrity policy. My words and actions will reflect Academic Integrity. I will not cheat or lie or steal in academic matters. I will promote integrity in the University of Mississippi community. For more information, refer to http://www.olemiss.edu/depts/general_library/instruction/resources/plagiarism_resources/lesson_plans.html

Attendance Policy:

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