

**WRIGHT STATE UNIVERSITY, INTRODUCTION TO THEORETICAL PHYSICS 481/681
WINTER QUARTER 2006**

CLASSICAL ELECTRODYNAMICS by J.D. Jackson – J. Wiley&Sons, Inc., New York , 3rd edition (1999).

LECTURER: Dr. Gregory Kozlowski – office 253F, telephone no. 775-3433.

LECTURE: M, W (4:10 p.m. – 5:25 p.m.), 108 Fawcett Hall.

OFFICE HOURS: M – Th (2:00 p.m. – 4:00 p.m.).

EXAMINATIONS: Mid-term exam and a final will be given during the quarter.

<u>GRADING:</u>	Mid-term exam	100 points
	Final	100 points
	<u>Homework</u>	<u>100 points</u>
	Total	300 points

100% --- **A** --- 85% --- **B** --- 75% --- **C** --- 65% --- **D** --- 50% --- **F** --- 0%

WRIGHT STATE UNIVERSITY
TENTATIVE SCHEDULE FOR INTRODUCTION TO THEORETICAL PHYSICS 481/681
WINTER QUARTER 2006

WEDNESDAY	MONDAY
1/4 Introduction	1/9 Chap 1 – 1,2,3,4,5 Electrostatics
1/11 Chap 1 – 6,7,8 Green's theorem	1/16 NO CLASSES
1/18 Chap 1 – 9,10,11,12 Green functions	1/23 Chap 2 – 1,2,3,4,5 Method of images
1/25 Chap 2 – 6,7,8 Orthogonal functions and expansions	1/30 Chap 2 – 9,10,11 Potential problems
2/1 Chap 3 – 1,2,3,4,5,6 Laplace equation in spherical coordinates	2/6 MID-TERM EXAM
2/8 Chap 3 – 7,8,9,10 Laplace equation in cylindrical coordinates	2/13 Chap 3 – 11,12,13 Green functions expansion
2/15 Chap 4 – 1,2,3 Multipoles	2/20 Chap 4 – 4,5 Electrostatics of macroscopic media
2/22 Chap 4 – 6,7 Dielectrics	2/27 Chap 5 – 1,2,3,4 Magnetostatics
3/1 Chap 5 – 5,6,7 Magnetic moment	3/6 Chap 5 – 8,9,10 Boundary-value problems in magnetostatics
3/8 Chap 5 – 11,12,13,14,15 Faraday's law of induction	3/13 Chap 5 – 16,17,18 Quasi-static magnetic fields in conductors

THE FINAL EXAM IS SCHEDULED FOR WEDNESDAY, MARCH 17
5:45 p.m. – 7:45 p.m. IN ROOM 108 FAWCETT HALL
