

GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF SCIENCE
COURSE OUTLINE
PHYSICS 243
WAVE MOTION AND ELECTRICITY
WINTER SEMESTER 1991-1992

INSTRUCTOR: Dr. Deah Mittra

LECTURE: M.W.F. 10:00 - 10:50 Po G

SEMINAR: R TBA TBA

LAB: M 3:00 - 5:50 J103

TEXT BOOK: Physics for Scientists & Engineers by SERWAY,
3rd Ed., Saunders Publication.
Lab Manual (same as last semester)

PREREQUISITE: Pc 241

COREQUISITE: MA 204

TOPICS: Oscillations; wave motion; sound waves;
electric charges; electric field; electric
potential; Gauss's Law; capacitance; electric
current; electromotive force and D.C. circuits.

MARK DIVISION:

Class Test	10 %
Mid-Term	20 %
Lab work	15 %
Assignments	15 %
Final	40 %
Total	100

Lab Schedule:-

Lab	Date	Exp#	Title
1	Jan. 13	14	Standing Waves in Air
2	20	15	Standing Waves on a String
3	27	Handout	Millikan's Oil Drop
4	Feb. 3	17	Mapping of Electric Field
5	10	19	Capacitance
6	Mar. 2	20	Simple Electric Circuits
7	9	21	Charging & Discharging of Capacitance
8	16	Handout	Specific Charge of Electron
9	23	18	Oscilloscope
10	30	Handout	TBA

Detailed Course Outline

Wk#	Chapter	Topics
1	13	13.1 - 13.6
2	16	16.1 - 16.6
3	First Test	16.7, 16.8, 17.1-17.4
4	17, 18	17.5, 18.1 - 18.7
5	Second Test	23.1 - 23.7
6	24, 25	24.1 - 24.4, 25.1
7	Mid Term	25.2 - 25.4
8	R E A D I N G	W E E K
9	25, 26	25.6, 26.1 - 26.3
10	26	26.4 - 26.6
11	Third Test	27.1 - 27.4
12	27, 28	27.5 - 27.7, 28.1
13	Fourth Test	28.2 - 28.4
14	28	28.5 - 28.8