

GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF SCIENCE

COURSE OUTLINE - PHYSICS 1060 (1992/93)w
INTRODUCTORY GENERAL PHYSICS II (3-0-3)
(fluids, heat, Thermodynamics, Electricity)

TOPICS COVERED: Fluids, Kinetic Theory, Heat, Thermodynamics,
Electric Charge & Field, Electric Potential &
Energy, Electric Currents, DC Circuits &
Instruments

TEXTBOOK: Physics Douglas C. Giancoli

LAB MANUAL: Physics 105/106/204 U of A (blue)

LAB BOOK: (Black) Hard Cover Physics

INSTRUCTOR: Dr. Robert Hunt (C414) (539-2008/532-1338)

PREREQUISITE: PC 1030 or PC 1050

COURSE OUTLINE

M W F 10:00 - 10:50 a.m. Lecture Component for PC 1060 (J226)

Chapter 10 Fluids - Density, Pressure, Pascal's Principle,
Archimedes' Principle, Fluids in Motion,
Bernoulli's Equation

Chapter 13 Temperature and Kinetic Theory - Temperature,
Thermal Expansion, Gas Laws, Absolute Temperature,
Ideal Gas Law, Avogadro's Number, Kinetic Theory

Chapter 14 Heat - Heat, Specific Heat, Latent Heat, Heat
Transfer (Conduction, Convection, Radiation)

Chapter 15 Laws of Thermodynamics - First Law of
Thermodynamics, Second Law of Thermodynamics, Heat
Engines, Entropy

Chapter 16 Electric Charge & Field - Static Electricity,
Electric Charge, Coulomb's Law, Electric Field

Chapter 17 Electric Potential & Energy - Electric Potential,
Capacitance, Electric Energy

Chapter 18 Electric Currents - Electric Current, Ohm's Law,
Electric Power

Chapter 19 DC Circuits and Instruments - Resistors, EMF,
Kirchhoff's Rules, Circuits, Ammeters and
Voltmeters

LABORATORY COMPONENT

W	or	R	or	F	3:00 - 5:50 p.m.	in J103 (Physics Lab)	
1st Lab	Experiment	#13	Properties of Fluids				Week of Jan. 11
2nd Lab	Experiment	#12	Viscosity				Week of Jan. 18
3rd Lab	Experiment	#14	The Constant Volume Gas Thermometer				Week of Jan. 25
4th Lab	Experiment	#15	The Mechanical Equivalent of Heat				Week of Feb. 1
5th Lab	Handout		Magnetic Balance				Week of Feb. 8
6th Lab	Experiment	#20	The Mapping of Electric Fields				Week of Mar. 1
7th Lab	Experiment	#18	Capacitance				Week of Mar. 8
8th Lab	Experiment	#21	Simple Electric Circuits				Week of Mar. 15
9th Lab	Experiment	#19	The Cathode Ray Oscilloscope				Week of Mar. 22
10th Lab	Experiment	#22	Measurement of e/m for Electrons				Week of Mar. 29

MARK DISTRIBUTION:	40%	Final Exam (TBA)
	20%	Lab Reports
	20%	Homework
	20%	Mid-Term (Feb. 17, 1993, 10 a.m.)
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	100%	Total

GRADING GUIDELINES:	Percent (Approx.)	Grade
	90 - 100%	9
	80 - 89%	8
	72 - 79%	7
	65 - 71%	6
	57 - 64%	5
	50 - 56%	4
	45 - 49%	3
	26 - 44%	2
	0 - 25%	1