

COURSE OUTLINE

COURSE: Physics 112

TEACHER: Mr. Fynamore, BSc., Bed. (I may be reached at school at 575-6020)

TEXT: Merrill Physics (Presently out of Print)

EQUIPMENT: pencil, scientific calculator, three ring binder, ruler.

EVALUATION: Assignments/Labs/Quizzes 30%
Tests 40%
Final Exam 30%

PREREQUISITES: Science 10; NRF & GMF Math 10

PRE/CO-REQUISITE: Foundations Math 110

OVERVIEW: This course is the first of two sequential Physics courses. Successful completion of Physics 112, as well as giving a science credit for high school graduation, provides valuable background for those university-bound students interested in such fields as, engineering, physics, oceanography, meteorology, astronautics, any of the physical sciences, or any program for which Physics is a prerequisite. Topics covered are: measurement, vectors, kinematics, including uniform motion and accelerated motion, Newton's laws of motion, forces and dynamics, introduction to momentum, work, power, energy, conservation of energy, wave motion, sound waves and light. More on the Curriculum can be found at www.gnb.ca/0000/anglophone-e.asp

- (1) Assignments are normally one or two per week. If an assignment is not handed in the relevant test will be worth more. Extensions will be granted for illness (bring a note) or at the discretion of the teacher.
- (2) If you know that you will not be present on the day that an assignment is due, make arrangements with me before that day, **NOT** after.
- (3) If I determine that you are habitually missing assignments, your parents maybe informed by a letter or phone. However, you are a young adult and will be treated with respect. Your schooling is your responsibility and this course is designed to prepare you for university, should you decide to go.
- (4) For full value you must **SHOW ALL YOUR WORK** (an answer is not enough since you will have access to the answers before the assignment is handed in). Give your answer in a **COMPLETE SENTENCE** when doing word problems. Some questions may require you to write more than a single sentence.
- (5) Extra help can be obtained at noon or Monday, Wednesday and Thursday after school.

(6) School polices will be sent home by synervoice. Paper copies are available by request.

- RULES:**
1. Do not be late. If you are habitually late you may not be allowed into class when you are late.
 2. Have all of the equipment that you need. If you habitually leave needed items in your locker, you may not be allowed to get them.
 3. If you miss a class without a valid excuse you will lose credit for any test or assignment done or due that day.
 4. Be polite and respect others and do not talk while I or others are talking.
 5. Do not waste class time. This only makes homework more difficult to complete.

TOPICS:	Chapter 2	Significant figures/factor label/graphs	2 weeks
	Chapter 3	Velocity	2 weeks
	Chapter 4	Acceleration	2 weeks
	Chapter 5	Forces	2 weeks
	Chapter 10	Work and simple machines	2 weeks
	Chapter 11	Energy	2 weeks
	Chapter 14	Waves	2 weeks
	Chapter 15	Sound Waves	2 weeks
	Chapter 17	Reflection and Refraction	2 weeks
	Chapter 18	Mirrors and Lenses (if time allows)	2 weeks

LABS AND DEMONSTRATIONS

- Chapter 2 - Density lab to review significant figures and measurement.
- Graphing lab to review graph types.
- Chapter 4 - Air table lab in the form of a ramp to review
- velocity vs time graphs and accelerated motion
- Chapter 5 - Calculate the coefficient of friction between brass and aluminium using a
mass on a white board ledge.
- Chapter 10 - Pulleys and ramps.
- Chapter 14 - several demonstrations with slinkies to show the properties of mechanical waves.
- several demonstrations with a water table to show the properties of waves in 2D
- Chapter 15 - several demonstrations with tuning forks to show the properties of sound waves.
- Chapter 17 - Calculate the index of refraction of a glass block.
- A number of minilabs to investigate the phenomenon of reflection & refraction.
- Chapter 18 - Lab exploring the six cases of image formation by a lens.
- Sheep eye dissection.

Parent Signature: _____