### Physics 11 2011-12

Teacher Name: Ms. Yalowega

Webpage:

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Room: # 52 (South)

<u>Text:</u> Workbooks, textbooks for reference – will be used for some topics

#### Topics to be Covered:

Physics 11 is an introductory course that focuses on the principles and theories of physics, encourages investigation of physical relationships, and illustrates the relationship between theory and application. The application of physics to everyday situations is highlighted throughout the curriculum. The topics covered have been chosen to be representative of the physics curriculum; the skills and knowledge providing a solid base for further study.

## **Unit 1: Introduction to Physics**

#### Unit 2: Kinematics.

- Displacement and Velocity in one Dimension.
- Acceleration in one Dimension.

#### **Unit 3: Dynamics**

- Projectile Motion in one Dimension.
- Force of Gravity.
- Force of Friction.
- Elastic Forces.
- Newton's Laws.
- Momentum in one Dimension.

# Unit 4: Energy

- Work and Energy.
- Law of Conservation of Energy.
- Power and Efficiency.

# Unit 5: Wave Motion and Geometrical Optics.

- Wave Properties and Light.
- Reflection of Light.
- Refraction of Light.

# Unit 6: Special Relativity.

# Unit 7: Nuclear Fission and Fusion.

\* Topics and order of topics may be subject to change.

Course learning outcomes can be found at: http://www.bced.gov.bc.ca/irp/

## **Expectations:**

- a) School supplies are to be brought to every class.
  - All handed out worksheets, booklets and labs put in neatly and organized into a binder.
  - Pens, Pencils, Ruler, Agendas, Textbook, Geometry Set, Three ring Binder and calculators (TI 83 Plus preferred).
- b) All labs/assignments are handed in at the beginning of class.
- c) Labs
  - If you miss a lab, you will have to make up the lab on your own time or you will have to do an equivalent project (poster, report, etc.) on your own time and hand it in lieu of the lab.
  - It is expected that each lab be written up in the format discussed.
  - The data must be clearly collected and labelled and the questions done.
  - Reports/assignments will be due at the start of the period on the specified date.

### **Evaluation:**

- Grades will be determined on all the work that is done during the year.
- Each term is worth 25 % of your final grade.
- Grades will be determined in the following manner (These may change).

Tests/Quizzes

70 %

Assignments/Projects/Labs/Homework

30 %

#### **TESTS and QUIZZES:**

- I will try and give you at least 2 days notice for any major test.
- You can expect a QUIZ every few classes, sometimes every class. Be prepared!

#### **Missed Tests:**

- If absence is excused you will be able to write the missed test before school the next Thursday morning.

# Final Exam:

- You will be required to write a final exam in this course. The final will be worth 25 % of your overall grade.

### Homework:

- All work is due at the beginning of the next class; unless a specific due date is given, or I decide to collect homework at random.
- If you are absent when homework is assigned, you are responsible for asking me for the homework when you come back to school, or check the in class homework board, or check the website for your homework.

### Missed Work:

- You are responsible for all missed work unless otherwise stated by your instructor.

### Extra Help:

- Ask for help from a peer or me if you need help.

### **Behaviour:**

- West Vancouver Secondary's Code of Conduct will be followed.
- Only one person talks at a time during class discussions.
- No food or drink in class.
- Only one person allowed out of the class at a time.
- I dismiss the class, the bell does NOT!
- No leaning back on the chairs, so legs of the chairs are not touching the floor.
- Mature responsible behaviour is expected during labs.
- You should know by now how to behave in a classroom. Inappropriate behavior will be addressed and dealt with immediately.

#### **Late Policy:**

- Classroom door will be closed as soon as bell rings.
- If late, knock on the door and I will open the door and talk to you when doing so does not interrupt the class.
- Multiple unexcused lates in a term will lead to appropriate punishment, ie. cleaning tables, detention and eventually a phone call home.

#### **Academic Responsibility:**

There is a zero tolerance for cheating, plagiarism or copying in this class.

