

## Course Outline

Welcome to Physics 11! This year will be both exciting and interesting! Physics 11 will introduce you to many interesting topics and build on what you have learned in grade 8-10. We look at familiar friends: velocity, acceleration, electrical circuits, and measurement. We will also make new acquaintances by incorporating what we already know into topics like Kinematics, Dynamics, and Nuclear Energy. To make our classes work, it is your responsibility to arrive to class with:

- Binder (please have a separate binder dedicated Physics 11)
- Pens/Pencils
- Paper (lined and graphing)
- Calculator
- Eraser
- Agenda

**A note on notes:** Fill in the blank notes will be uploaded to the class website for you to print and bring to class. This is completely optional. If you decide not to print notes out at home you will be responsible for taking all your own notes in class. You are able to print in the library for a small fee.

## Course Content

### 1) Measurement

Significant Figures  
Metric System and Unit Conversions  
Experimental Error  
Formula Manipulation  
Period and Frequency

### 2) Linear Graphing

Graphing, slope calculation, line equations  
Interpolate and Extrapolate

### 3) Kinematics

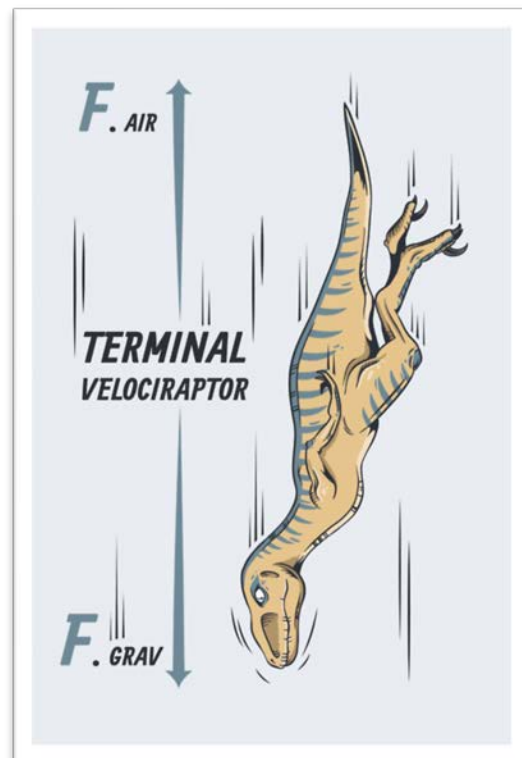
Speed, acceleration & Graphical Analysis  
Kinematic Equations

### 4) Dynamics

Gravity, friction, Hooke's Law  
Newton's 3 Laws of Motion  
Impulse, Momentum and Collisions

### 5) Energy

Energy types & transformations



Potential and kinetic energy  
Heat (thermal) energy (temperature, specific heat capacity)  
Law of Conservation of Energy  
Work, power, and Efficiency

#### 6) Electric Circuits

Current, resistivity, and voltage  
Ohm's Law  
Kirchoff's Laws  
Circuit Analysis

#### 7) Nuclear Energy, Waves and Optics, Special and General Relativity, Vectors and Scalars\*

\*These units are optional. We will go over two or more of these units if time permits

#### Website

There is a teacher website: [mrastevens.weebly.com](http://mrastevens.weebly.com), where you and your parents can check for homework and assignments. Copies of handouts and notes may be posted on the site as well. Copy and paste the url directly into your browser. I find google often "misplaces" my class site.

#### Extra Help

You can always email me at [astevens@vsb.bc.ca](mailto:astevens@vsb.bc.ca).

Feel free to stop by before school, between classes or immediately after school for extra help.

#### Skills/Learning Assistance/Strategies Blocks

Students with skills blocks have the option of writing their tests in the learning resource center. Some smaller quizzes/assessments may be written either in class or with your learning assistance teacher at their discretion. While all students should strive to complete assignments on their due dates, extensions and additional adaptations can be provided on a case-to-case basis.

#### Absences and Lates

Students are expected to attend every class and to arrive on time. If you miss a class you are responsible for all missed work. Contact a peer or see me to get any missing handouts. Missed tests will be dealt with on an individual basis but often result in a make up test at the teacher's convenience provided there was an excused absence.

#### Marks

You will be assessed through tests/quizzes and assignments. I will not surprise you with HW or binder checks. I mark cumulatively (what you do in Term 1 still counts towards your mark in Term 3).

#### Marks Breakdown

<i>Year Breakdown</i>	
Assignments/HW	40%
Tests & Quizzes	60%

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*\*Marks breakdown is subject to change depending on my discretion. Of course, you will be well informed prior to it changing\**

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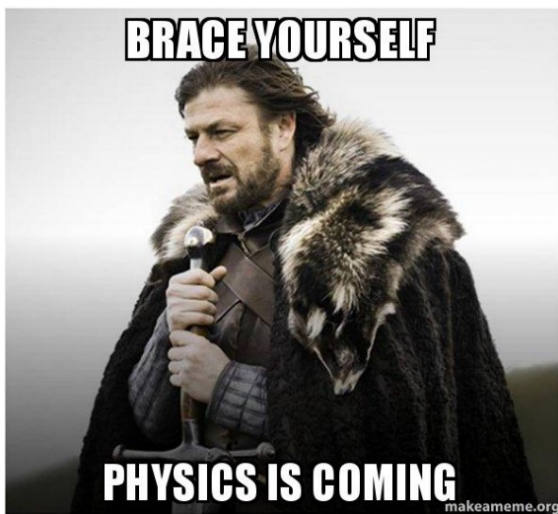
## Exams

In general, there will be a test for each course unit and a cumulative “Term Exams” at the end of each term. There will also be several quizzes and problem sets that contribute to your overall mark.

The three “Term Exams” will cumulatively count as your final exam (subject to change)

## Classroom Rules

I have 6 major rules. In no particular order. Know them!



**1) Mr. Stevens is always right!\***

**2) No bags or jackets on the tables, put them at the back of your chair or underneath your table**

**3) Keep your electronics away until there is an appropriate time to check them**

**4) No food/snacks in the lab. Only water**

**5) No Cheating of any kind**

**6) Respect everyone in the class.**

*\*Please have a sense of humour and enjoy Physics 11 with me!\**