

## New Westminster Online Learning School

### Physics 11:

#### Course Description

- Students considering taking this course should have, within the past 5 years, achieved at least a B in Foundations of Mathematics and Pre-calculus 10 or an equivalent course or by our assessment.
- In this online course, we learn how forces acting on an object affect its movement and energy level. Wave motion, including sound waves, and electric circuits are also explored.

#### Course Expectation

Students are expected to complete their online course within a 4-5 month period of time. If additional time is needed, contact your course instructor.

#### Enduring Understanding/Big Ideas\_(taken right from bced.gov.bc.ca)

Students will focus on:

- An object's motion can be predicted, analyzed, and described.
- Forces influence the motion of an object.
- Energy is found in different forms, is conserved, and has the ability to do work.
- Mechanical waves transfer energy but not matter.

#### Specific Learning Outcomes

[https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/curriculum/science/en\\_science\\_11\\_physics\\_elab.pdf](https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/curriculum/science/en_science_11_physics_elab.pdf)

#### Course Content

Unit 1	Skills, Methods, and the Nature of Physics
Unit 2	Kinematics
Unit 3	Forces
Unit 4	Newton's Laws of Motion
Unit 5	Energy
Unit 6	Wave Motion and Sound Waves
Unit 7	Electric Circuits

### Student Learning Activities and Strategies

- The online lessons use a combination of text, short videos, and animations.
- This course aims to promote the development of the understanding of physics through inquiry and problem solving.

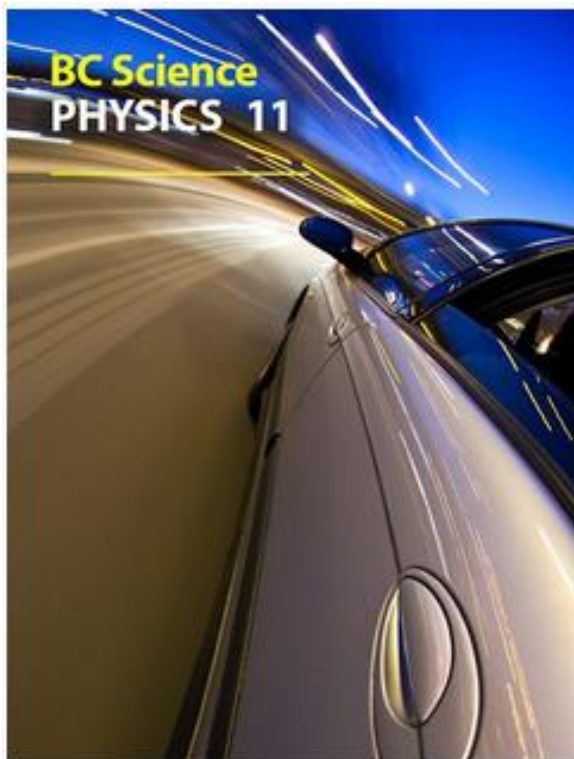
### Assessment

- This course has seven units. There is one test per unit. You must complete the tests in order starting with Unit 1.
- The tests are timed. Each test is intended to be done within 60 minutes, except for the Unit 1 Test which is 20 minutes shorter.
- You are expected to complete one Unit Test every 2-3 weeks.
- The Unit Tests can be done online from any location where a student has the use of reliable technology with a dependable internet connection. Please note though that at any time during this course, students may be required to come on-site to write a test.
- There is no final exam. Students must complete all 7 tests to obtain a course mark.

### Evaluation

A student's final mark in this course is based on their seven Unit Tests submissions.

### Resources



Students could get by without the BC Science Physics 11 WORKTEXT for Unit 1, but you will definitely need it for Units 2-7.

There are a few ways to do this:

1. If you're an adult or out-of-district student, buy a book for \$30 from Columbia Square Education Centre (#200 – 1065 Columbia St, Phone: 604-517-6191) between the hours of 9:30am-3:30pm on school days. Workbook fees are non-refundable.

or

2. If you currently attend NWSS, borrow a book from Room #3039 on the top floor.