



# Physics 11

## 2025-26 Course Outline

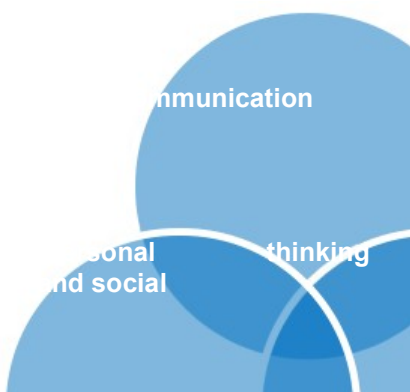
### Ms. Madar

Room: E511

Email: emadar@sd44.ca

Tutorial time: Mon-Fri 8:30-9:10am

#### Core Competencies:



#### Curricular Competencies in Physics



#### Big Ideas in Physics 11

See <https://curriculum.gov.bc.ca/curriculum/science/11/physics>

- 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.

#### Assessment:

Assessment will be based on the Curricular Competencies as outlined on the ministry of education website. It will be composed of informal observations of in-class work, laboratory investigations, projects, and formal assessments and the end of each unit.

## **Course Content**

### **Measurement**

Unit conversions, scientific notation, significant figures, vector and scalar quantities, graphical methods, lines of best fit

### **Kinematics**

Displacement, speed, velocity, uniform and accelerated motion in one-dimension, projectile motion

### **Dynamics**

Newton's laws of motion, friction force, tension force, spring force, weight, gravitational forces, free body diagrams, and forces in two dimensions.

### **Energy**

Energy, conservation of energy, power, efficiency, simple machines, mechanical energy, thermal energy, thermal equilibrium and specific heat capacity

### **Waves**

Properties and behaviour, pulse versus periodic, resonance, frequency, pitch, reflection, refraction, sound, light, Doppler effect

### **Electrical circuits**

Voltage, current, resistance, Kirchhoff's laws, switches, breakers/fuses.

### **Policies and Expectations:**

Students are expected to:

- adhere to the school "Code of Conduct"
- keep cellphones/digital devices out of sight, unless specifically used for a class activity (not as a calculator)
- notify the teacher in advance when there is a planned absence
- make up for missed work and assignments when absent from class

### **Materials**

- BC Science Chemistry 11 Textbook
- Scientific calculator
- Binder with lined paper, pencil, eraser
- whiteboard marker
- Class materials will be posted regularly on MS Teams

### Course Evaluation

- Students' final marks will reflect how well they've met the curricular outcomes and are not based solely on numerical assessments. They will determine what students know, are able to do and are working toward.
- Assessment in this course is cumulative, adding together throughout the year, rather than breaking down by term
- Assessment methods may include, but are not limited to:
  - Teacher observation
  - Student self-assessments
  - Chapter tests and lesson quizzes
  - Projects and lab activities

### Letter Grades:

A:	86-100%	Excellent
B:	73-85%	Very Good
C+:	67-72%	Good
C:	60-66%	Satisfactory
C-:	50-59%	Minimally Acceptable
I:	0 – 49%	Incomplete
F:	0 – 49%	Failed to Complete

### Class Expectations:

- Meet Due Dates - All assignments will be due at the beginning of class. Assignments or labs handed in after work has been returned **will not be marked**, nor will assignments handed in after a unit test.
- Own Your Own Learning – Completing practice work is expected and is necessary for success in this course, but it is not sufficient. **Homework is practice.** *It does not matter that you completed your homework, it matters that you understand the concepts and can complete similar questions in the future.* This may mean you need to review and repeat this work to attain mastery.
- Attend Class – It's much harder to catch up on missed material than to learn it with everyone else in class. Come to class, and arrive on time so you don't miss any crucial concepts.
- Take Responsibility for Absences - If you are absent and missed notes, an assignment or activity, you will be expected to make it up on your own time. If you miss class, you are expected to check MS Teams to follow along with missed material and copy out all notes yourself. Do not show up to class empty-handed.

### Plagiarism, Cheating, and Academic Dishonesty

Plagiarism is the act of using someone else's words, ideas, images, or work—whether copied directly or paraphrased—without properly crediting the original source. Cheating refers to giving or receiving unauthorized assistance on any task that is meant to be completed individually.

Both plagiarism and cheating are serious academic offenses and will have a significant impact on your course grade. No credit will be given for any work found to involve academic dishonesty, and no opportunity for make-up or resubmission will be provided.