

Instructor Wooje Choi wchoi@sd43.bc.ca

Availability Mon/Wed 5:00 pm – 9:00 pm

Introduction

Welcome to Physics 11 at **Coquitlam Learning Opportunity Centre**. This is a self-paced, self-directed interactive course that provides an introductory insight into an understanding of our physical world by examining the scope, nature, relevance and limitations of Physics. The topics in this course cover the intended learning outcomes for Physics 11 in BC. They have been chosen because they illustrate the substance of physics – they are accessible to most students, and are related to other aspects of your general education and life experiences.

Expectations

You will be expected to work independently through the online materials in Moodle – taking proper notes, working through the practice problems, Practice Assignments, and Self-Check Assignments. Individual help is available from your instructor at the Learning Centre. No laboratory work is included in this course.

Evaluation

Your course mark is based on 6 unit tests, one midterm, and the final exam:

TEST	CONTENT	PERCENT
➤ Unit 1	Math Prep.	5
➤ Unit 2	Kinematics	10
➤ Unit 3	Forces and Newton's Laws	10
➤ Midterm #1	Unit 1 – 3	10
➤ Unit 4	Momentum	10
➤ Unit 5	Work, Energy, Power, and Heat	10
➤ Unit 6	Waves and Optics	10
➤ Midterm #2	Unit 4 – 6	10
➤ Final Exam	Unit 1 – 6	25
	TOTAL	100

Important to Remember

1. All tests **MUST** be written in person at CLOC during Learning Centre hours.
2. You need to write the first unit test within 30 days of registering for this course.
3. You are allowed **ONE** rewrite for each unit test in Physics 11.
4. You will **NOT** be allowed to rewrite the midterm tests or final exam.
5. If you choose to rewrite a test, you must complete the rewrite **BEFORE** proceeding further in the course.
6. If you choose to rewrite a test, the **AVERAGE** of the two test scores will be used in your course mark calculation.
7. Please note, rewrite privileges may be revoked at any time if a teacher determines that you are abusing the rewrite policy.

Prescribed Learning Outcomes

Kinematics:

- C1 *apply knowledge of the relationships between time, displacement, distance, velocity, and speed to situations involving objects in one dimension*
- C2 *apply knowledge of the relationships between time, velocity, displacement, and acceleration to situations involving objects in one dimension*

Dynamics in One Dimension:

- D1 *solve problems involving the force of gravity*
- D2 *analyse situations involving the force due to friction*
- D3 *apply Hooke's law to the deformation of materials*
- E1 *solve problems that involve application of Newton's laws of motion in one dimension*
- F1 *apply the concept of momentum in one dimension*

Energy:

- G1 *perform calculations involving work, force, and displacement*
- G2 *solve problems involving different forms of energy*
- G3 *analyse the relationship between work and energy, with reference to the law of conservation of energy*
- G4 *solve problems involving power and efficiency*

Wave Motion and Geometrical Optics:

- B1 *analyse the behaviour of light and other waves under various conditions, with reference to the properties of waves and using the universal wave equation*
- B2 *use ray diagrams to analyse situations in which light reflects from plane and curved mirrors*
- B3 *analyse situations in which light is refracted*