

Course Name	Grade 11 University Physics Course Brief	Grade	11
Course Code	SPH 3U1/3	Credit Value	1.0
Pre-Requisite	Grade 10 Academic Science	Or Recommended Pre-Requisite	Grade 10 Academic Math
Type of Course	University		

TEXTBOOKS

Physics 11 (Mcgraw-Hill Ryerson)

REPLACEMENT COST (if lost or damaged)

\$ 100

COURSE DESCRIPTION

This course develops students' understanding of the basic concepts of physics. Students will explore kinematics, with an emphasis on linear motion; different kinds of forces; energy transformations; the properties of mechanical waves and sound; and electricity and magnetism. They will enhance their scientific investigation skills as they test laws of physics. In addition, they will analyze the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment.

Curriculum Strands/Categories (this may differ depending on discipline and level)

Knowledge and Understanding: Subject-specific content acquired in each grade/course (knowledge), and the comprehension of its meaning and significance (understanding)

Thinking: The use of critical and creative thinking skills and/or processes

Communication: The conveying of meaning through various forms

Application: The use of knowledge and skills to make connections within and between various contexts

Assessment and Evaluation of Student Achievement

Unit	Unit Title/Description
Unit 1: Kinematics	Chapter 2: Describing Motion Chapter 3: Motion in a Plane
Unit 2: Dynamics	Chapter 4: Newton's Laws
Unit 3: Work and Energy	Chapter 5: Work and Mechanical Energy Chapter 6: Energy Transformations
Unit 4: Electricity & Magnetism	Chapter 13: Electric Energy and Circuit Chapter 14: Magnetism
Unit 5: Waves & Sound	Chapter 7: Waves Transferring Energy Chapter 8: Exploring the Wave Model of Sound Chapter 9: Sound in Our World

In addition to students' performance in the achievement categories, students will also be assessed on their performance in the following learning skills:

Responsibility Organization Independent Work Collaboration Initiative Self-Regulation

Weighting by Strands/Categories

Knowledge and Understanding	30%	Communication	15%
Application	15%	Thinking	10%

CALCULATION OF FINAL MARK

→ 70% for evaluations conducted throughout the course

→ 30% for a Culminating Activity (CA)

The CA will occur in the final 6 weeks of the course.

This Course Brief is subject to change.