



Durham District School Board  
Brooklin High School  
Science Department  
Course Outline: PHYSICS, Grade 11, University

Department Head: D. O'Neill

Teachers:

Course Code: SPH 3U1 (Credit Value: 1.0)

Prerequisites: SNC 2D1

***Overall Curriculum Expectations:***

Students will analyze the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment. They will develop the skills, strategies, and habits of mind required for scientific inquiry, and understand the basic concepts of physics.

***Course Description:***

This course enables students to 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.

***Course Strands:***

Scientific Investigation Skills and Career Exploration, Kinematics, Forces, Energy and Society, Waves and Sound, and Electricity and Magnetism

***Units of Study:***

Unit 1: Kinematics

Unit 2: Forces

Unit 3: Energy and Society

Unit 4: Waves and Sound

Unit 5: Electricity and Magnetism

***Teaching Strategies:***

A variety of teaching and learning strategies will be incorporated throughout the course.

***Assessment & Evaluation:***

Assessment and evaluation will encompass all four categories of achievement: **Knowledge and Understanding; Thinking/Inquiry; Communication; and Making Connections/Application.** This course will involve a number of assessment and evaluation strategies that will provide all students an opportunity to meet with success.

***Term Work: 70%***

Labs and Assignments 30%

Quizzes 10%

Tests 30%

***Final Summative: 30%***

Summative Project 5%

Final Exam 25%

***Learning Skills and Work Habits:***

The following Learning Skills and Work Habits are evaluated regularly using a scale of Excellent, Good, Satisfactory or Needs Improvement: **Responsibility, Organization, Independent Work, Collaboration, Initiative, Self-Regulation.**

***Textbook:*** Nelson Physics 11 (2012) (replacement cost: \$80.00)

***Class requirements:*** 3-ring binder, scientific calculator, pen, pencil, ruler