

Henry Street High School

SPH 4U1

Physics, University Preparation

COURSE OUTLINE

COURSE DESCRIPTION

This course enables students to deepen their understanding of the concepts and theories of physics. Students will further develop their inquiry and problem solving skills by exploring the laws of dynamics, energy transformations, gravitational, electric and magnetic fields and the interface between energy and matter. Students will also consider the impact of technological applications of physics on the society and the environment..

UNITS OF STUDY

UNIT 1 – Scientific Investigation Skills and Career Exploration

UNIT 2 – Kinematics and Dynamics

UNIT 3 – Energy and Momentum

UNIT 4 – Electric, Gravitational and Magnetic Fields

UNIT 5 – The Wave Nature of Light

UNIT 6 – Quantum Mechanics and Special Relativity

ASSESSMENT AND EVALUATION

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Each unit may include the following strategies:

- ❖ Quizzes
- ❖ Lab Activities
- ❖ Assignments
- ❖ Computer Activities
- ❖ Tests/Unit Tests

SUMMATIVE EVALUATIONS

Summative evaluations will include marks from at least one of the following categories:

Knowledge	35%
Thinking/Investigation	35%
Application	15%
Communication	15%

FINAL EVALUATION

Term Work	70%
Final Summative Evaluation	30%

OTHER INFORMATION

TEXTBOOK - Nelson Physics 12 - \$80 replacement cost

EQUIPMENT: Binder, calculator, pen, pencil, ruler, paper, graph paper