

ST. JOSEPH CATHOLIC SECONDARY SCHOOL

COURSE OUTLINE



Grade 11 University Physics: SPH 3U

Course Prerequisite: **SNC2D** , **having completed MPM2D is strongly**

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 analyse the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment.

Catholic Graduate Expectations:

Through the study of physics, students have the opportunity to “discover the laws which govern the universe, as well as their interrelationship.” They (scientists, and therefore students) can “stand in wonderment and humility before the created and feel drawn to the love of the Author of all things.” (address of Pope John Paul II to the Jubilee of Scientists May 25, 2000) The study of any science helps students to learn to be reflective, critical, and creative thinkers, as well as discerning believers, who can apply their knowledge to the world around them. They can then make appropriate decisions in light of Gospel values and Church teachings. Through the study of the techniques of science, particularly experimentation, students learn to be collaborative contributors to an interdependent team, respecting the rights, responsibilities, and contributions of others. Overall, students become aware of the spiritual, as well as the physical dimension of the world and of the need to respect the environment and to use resources wisely in order to fulfill their roles as stewards of God's creation. “By increasing his knowledge of the universe ... man has a veiled perception ... of the presence of God....” (address of Pope John Paul II to the Jubilee of Scientists May 25, 2000)

recommended

Units of Study

Unit 1	<i>Kinematics</i>
Unit 2	Forces
Unit 3	Energy and Society
Unit 4	Waves and Sound
Unit 5	Electricity and Magnetism

**ST. JOSEPH CATHOLIC SECONDARY SCHOOL
COURSE OUTLINE**



Evaluation

70%	30%
Knowledge/Understanding	Culminating Task (10%) and Exam (20%)
Thinking/Inquiry	
Communication	
Application	

Course Resources Required:

- **Calculator**

For a detailed course description of this course, please visit
<https://www.edu.gov.on.ca/eng/curriculum/secondary/subjects.htm>