Course Outline 2017/2018
SPH3U1 - Physics, Grade 11, University Preparation

All courses within HDSB are taught in learning environments that promote inclusive education, and identify and eliminate discriminatory biases, systemic barriers, and power dynamics that limit the ability of students to participate, learn, grow, and succeed. All students see themselves reflected in the curriculum, their physical surroundings, and the broader environment, so that they are engaged in and empowered by their learning experiences.

The expectations in Grade 11 Physics, University Preparation are organized in six strands, the first focusing on scientific investigation skills and the remaining five representing major topics in the study of physics. The six strands are as follows:

Scientific Investigation Skills and Career Exploration ❏ Demonstrate scientific investigation skills in four areas: initiating and planning, performing and recording, analysing and interpreting and communicating. ❏ Identify and describe a variety of careers related to the fields of science under study, and identify scientists, including Canadians, who have made contributions to those fields.	**Kinematics** ❏ Motion involves a change in the position of an object over time. ❏ Motion can be described using mathematical relationships. ❏ Many technologies that apply concepts related to kinematics have societal and environmental implications.
Forces ❏ Forces can change the motion of an object. ❏ Applications of Newton's laws of motion have led to technological developments that affect society and the environment.	**Waves and Sound** ❏ Mechanical waves have specific characteristics and predictable properties. ❏ Sound is a mechanical wave. ❏ Mechanical waves can affect structures, society, and the environment in positive and negative ways.
Energy and Society ❏ Energy can be transformed from one type to another. ❏ Energy transformation systems often involve thermal energy losses and are never 100% efficient. ❏ Although technological applications that involve energy transformations can affect society and the environment in positive ways, they can also have negative effects, and therefore must be used responsibly.	**Electricity and Magnetism** ❏ Relationships between electricity and magnetism are predictable. ❏ Electricity and magnetism have many technological applications. ❏ Technological applications that involve electromagnetism and energy transformations can affect society and the environment in positive and negative ways.

Learning Skills & Work Habits

❏ Responsibility ❏ Organization ❏ Self-Regulation

❏ Independent Work ❏ Collaboration ❏ Initiative

Learning skills and work habits are an important part of your growth. Learning Skills and Work Habits will be taught, assessed, evaluated, and shared on your report card. This gives you and your parents/guardians valuable information about your learning.

How your grades will be determined	
Your work throughout the semester accounts for **70%** of your final grade: • Your teacher will collect and track evidence of your learning through observations of your work; conversations with you; and by evaluating the work you produce. • Your teacher will provide feedback to help you with further study and improvement • Your 70% work will be returned for your review and reflection.	15% **Knowledge & Understanding**: subject-specific content acquired (knowledge), and the comprehension of its meaning and significance (understanding). 20% **Application**: the use of knowledge and skills to make connections within and between various contexts. 20% **Thinking**: the use of critical and creative thinking skills and/or processes. 15% **Communication**: the conveying of meaning through various forms (oral, visual, and/or written). *(The Science Teacher Subject Council has determined the weightings of the above categories for this course)*
The Final Evaluations account for **30%** of your final grade[3]: • A portion of your Final Evaluation will take place in class at or near the end of your course. It will not require significant preparation outside of class time.[2] • Another portion will take place during the Evaluation Block of time after classes end.	**15% In Class Final Evaluation:** A performance task consisting of an investigation or an open-ended problematic situation; completed during final four weeks of the course; individual student effort; evaluated by teacher. **15% Evaluation Block Final Evaluation:** A 1.5 hour exam within a 2 hour time slot consisting of a variety of question types (e.g., short answer, multiple choice, extended response, problem solving, etc.); individual student effort; evaluated by teacher
Your **final grade** will be calculated by combining your Term (70%) grade and your Final Evaluations (30%).	

For more information about what you need to know about…

1) Meeting Timelines and Academic Honesty [1]- goo.gl/KTAh40

2) Final 30% Evaluations [2] - goo.gl/W82PYL

3) Determining Report Card Grade [3] - goo.gl/FuzbMW

Your teacher can provide you with a paper copy of this information if required.