



**COURSE DETAILS**

Course Code: 0123  
Course Name: Physics 30S  
Credit Value: 1.0  
Prerequisite: Science 20F

Welcome to  
**physics**

**CONTACT INFORMATION**

Room 14 McCreary School  
MS Teams: Physics 30  
Email: jlockhart@trsd.ca  
School phone: 835-2083

**COURSE TECHNOLOGY**

Office 365  
MS Teams: Physics 30

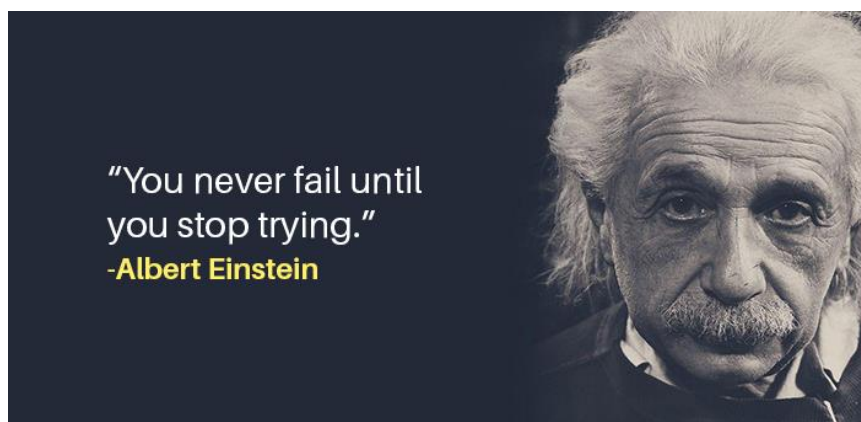
**COURSE TEXTBOOK**

Physics: Concepts and Connections. Irwin Publishing Ltd. 2002

**SUPPLIES**

- 2" – 3 ring binder
- Loose leaf
- Graph paper
- Scientific calculator
- Ruler
- Pens
- Pencils
- Erasers
- Highlighters

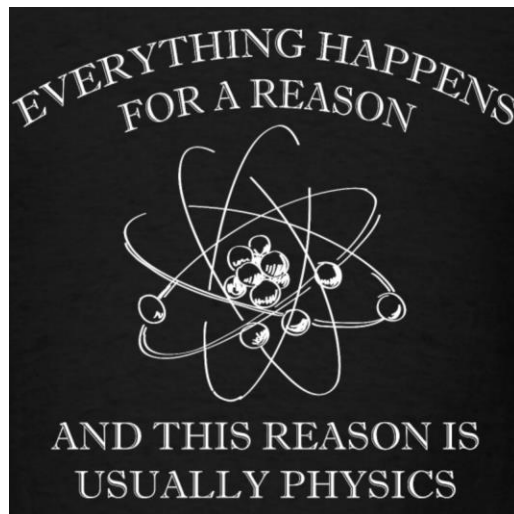
Timeline	Unit & Topic
September	<b>Mechanics</b>
	Kinematics
	Vectors
October	Dynamics
	<b>Fields</b>
	Gravitational Fields
November	Electric Fields
	Magnetic Fields and Electromagnetism
	<b>Waves</b>
December	Waves in One Dimension
	Waves in Two Dimensions
January	<b>Sound &amp; Light</b>
	Resonance and Beats
	The Nature of Light
	<b>Exam Review</b>
	<b>Final Exam</b>



## UNIFYING CONCEPTS & GENERAL OUTCOMES

As a result of their Senior Years science education, students will

- ✓ describe and appreciate the similarity and diversity of forms, functions, and patterns within the natural and constructed world
- ✓ describe and appreciate how the natural and constructed world is made up of systems and how interactions take place within and among these systems
- ✓ recognize that characteristics of materials and systems can remain constant or change over time, and describe the conditions and processes involved
- ✓ recognize that energy, whether transmitted or transformed, is the driving force of both movement and change, and is inherent within materials and in the interactions among them



## RULES & EXPECTATIONS

### ➤ Daily Classroom Expectations

Show up to class on time, with all your supplies, and use class time effectively. Take responsibility for your learning by completing all assigned work and being proactive rather than reactive.

### ➤ Technology in the Classroom

Technology will be an integral part of the functionality of the classroom. Students will have access to the school laptops, but are encouraged to bring their own device. Improper use may result in a loss of certain privileges.

### ➤ Student Lates & Absences

Students who are late for class are asked to come in quietly without causing a disruption. Students who make a habit out of being late may not be allowed into the room if class has already begun.

If you are absent, YOU are responsible for finding out what you missed and making up all missed work. If you have an excused absence for the day of a test, please make arrangements to write it the day you return to school. If you skip a test or quiz you will receive a zero.

### ➤ Academic Dishonesty

Academic dishonesty including (but not limited to) inappropriate collaboration, cheating, or plagiarism is a severe offence and will be dealt with according to the policy outlined in the school handbook.

### ➤ Extra help

Arrangements can be made for in person extra help before or after school or during lunch hour. Students can also ask for clarification or feedback via email, MS Teams chat or discussion post, or schedule a Teams meeting.

## ASSESSMENT

### ➤ Homework

This course has a lot of content. We will do our best to cover as much as we can in class, but you will inevitably end up with homework. You won't have homework *every* night, but when it is assigned it is expected to be completed on time. In order to get the greatest benefit from scheduled direct instruction, students need to be prepared, which means having assigned work completed.

### ➤ Assignments

A lot of the work students complete will not be graded, but that does not mean that it's not important. These practice opportunities are meant to help both the student and the teacher assess whether or not the student has developed an appropriate level of understanding prior to being given a summative assessment which will contribute to the final grade.

### ➤ Incomplete and Late Work

Work is to be completed on time and to the best of the student's ability. Late or missing assignments will be penalized as outlined in the school student handbook, "Upon teacher discretion, a maximum of 5% may be deducted for every day the assignment is not turned in. If the assignment is not turned in after two weeks or at the start of a new unit, the assignment will receive a mark of zero."

### ➤ Quizzes

Quizzes will take place frequently to encourage students to stay up-to-date on course materials. Students will not be allowed a personalized study sheet for quizzes. If formulas are required for the quiz a standard formula sheet will be provided.

### ➤ Tests

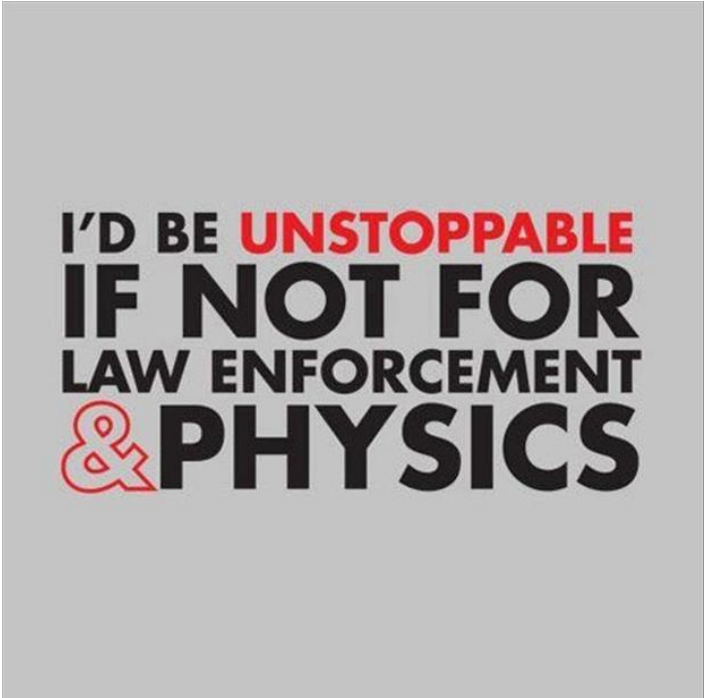
There will be 6 tests throughout the semester. Students are allowed a personalized study sheet for each test. The study sheet is to be a maximum of one side of a HALF of 8.5" x 11" paper. If formulas are required for the test a standard formula sheet will also be provided.

### ➤ Test Re-writes

A student may request a retest for ONE of the 6 tests. Re-writes will take place during the final week of class before the exam. If a re-write is done, the new mark replaces the old mark (for better or worse).

### ➤ Final Exam

All students will be required to write the final exam at the end of January. The final exam is worth 30% of the student's overall grade. Students are expected to create their own one-page, double-sided 8.5"x11" study sheet for the exam.



I'D BE **UNSTOPPABLE**  
**IF NOT FOR**  
**LAW ENFORCEMENT**  
**& PHYSICS**

Assessment Category	Assessment Item	Item Weight	Category Weight
<b>Mechanics</b> ➤ Course Intro ➤ Kinematics ➤ Vectors ➤ Dynamics	Describing and Representing Motion Quiz Graphing Motion Assignment Kinematics Equations Quiz Kinematics Test Vectors Quiz Laws of Motion and Free-Body Diagrams Quiz Mechanics Equations Quiz Dynamics Test	5% 5% 10% 25% 10% 10% 25%	24%
<b>Fields</b> ➤ Gravitational Fields ➤ Electric Fields ➤ Magnetic Fields & Electromagnetism	Gravitational Fields and Vertical Motion Quiz Gravitational Fields Test Electric Fields and Forces Quiz The Milliken Drop Experiment – Assignment Magnetic Fields and Electromagnetism Quiz Fields Unit Review Assignment Electric and Magnetic Fields Test	10% 25% 10% 5% 10% 15% 25%	24%
<b>Waves</b> ➤ Waves in One Dimension ➤ Waves in Two Dimensions ➤ Sound ➤ Nature of Light	Waves in 1-D Quiz Waves in 2-D Quiz Waves in One and Two Dimensions Test Nature of Sound Quiz The Nature and Speed of Light Quiz The Wave Theory of Light and Wave-Particle Duality Quiz Sound and Light Test	10% 10% 25% 10% 10% 10% 25%	22%
<b>Final Exam</b>	The final exam will take place in January. The details of the exam will be posted at a later date.	100%	30%

\* All assessment items are subject to revision based on our evolving circumstances.

### Behaviour Assessment

- Personal Management Skills - The student self-monitors own behaviors and personal growth, organizes for learning, contributes positively to the learning process and takes responsibility for work completion.
- Active Participation in Learning - The student participates actively in learning, is curious, sets learning goals, self-assesses, provides feedback, and uses feedback for improvement.
- Social Responsibility - The student demonstrates citizenship and social skills that contribute to making the classroom, school, and larger community a positive, safe and caring environment.

## Physics 30S - A Letter to Parents

Students are encouraged to speak to me directly as soon as any questions, concerns or problems arise. Parents are also encouraged to call or email anytime you'd like to express concern or request information regarding your child's progress in the course. On that note, there may be times when I have a concern that I would like to address prior to the next report card or progress report and email is the easiest way for me to do this. If possible, please provide me with your email address below. If you do not have an email, please provide a phone number that could be used to reach you during the day. I'm looking forward to a great year.

Mrs. Lockhart

Student's name \_\_\_\_\_

Student's signature \_\_\_\_\_

Parent / Guardian's name(s) \_\_\_\_\_

Parent / Guardian's signature(s) \_\_\_\_\_

Date \_\_\_\_\_

Parent / Guardian Email Address \_\_\_\_\_

Parent / Guardian Day-time Phone \_\_\_\_\_

Initial comments or concerns \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

