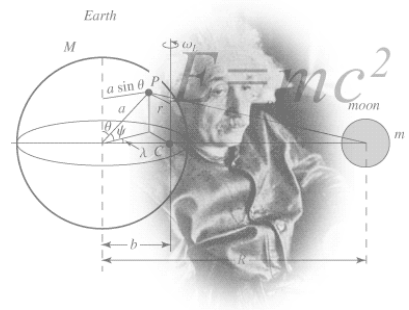


**Physics 30S**  
Teulon Collegiate Institute  
2015-2016



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Welcome to Grade 11 Physics! In this course, we will be learning to describe and explain the world around us. This course will cause you to look at the world around you and consider why and how things happen. The more you discover about yourself and the world, the more fascinating the world becomes! Your opportunities to make a great impact on society will grow as your understanding and knowledge of the sciences increases. This course is the foundation for all future Physics study and will help you develop important critical thinking skills.

### Prerequisite

Students entering Physics 30S have completed Grade 10 science and math courses and therefore should have an understanding of mathematics, formulas and graphing and use scientific notation. Students should also have a basic understanding of motion and electricity.

### Course Expectations

- 1) The Three R's.
  - a. **R**espect yourself
  - b. **R**espect others
  - c. **A**ccept **R**esponsibility for all of your actions
- 2) Research and summarize portions of the course material on your own.
- 3) Attendance is mandatory. In the event of an absence, it is *your responsibility* to obtain notes and assignments from another student and to catch up on any missed work while away.
- 4) Apply study skills early on and throughout this course.

*There is not a sprig of  
grass that is  
uninteresting to me.*  
~ Thomas Jefferson

### Assignments/Quizzes:

You will be given a few hand-in assignments and/or quizzes each unit. Once assignments are handed back to the class, you will no longer be allowed to hand in that assignment.

## Goals

1. To have fun learning while increasing your interest in Physics.
2. To develop your critical thinking, problem solving, and group co-operation skills.
3. For you to apply your acquired knowledge critically to current world issues.
4. My main objective is TO MAKE YOU THINK!!!!

## Evaluation

You will never be surprised with any assessments. I will always give you an outline of how you will be assessed and what you will be assessed on. You will need to keep up with your homework, study, and work hard to do well in this course and take advantage of this learning opportunity you have been given.

To achieve high marks in this course you will be expected to utilize appropriate scientific vocabulary, read and understand scientific tables and data, and to seek out extra help when needed. Students will be assessed in a variety of ways on all curricular outcomes. Course material will be weighted as follows:

### Term (70%):

Knowledge and Understanding	50
Design Process and Problem Solving	30
Scientific Inquiry Process	20

### Exam (30%)

**Note:** All assignments are due at the **beginning** of class.

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*We must use time wisely and forever realize that the time is always ripe to do right*  
~Nelson Mandela

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*We are what we repeatedly do. Excellence, therefore, is not an act but a habit.*  
~ Aristotle



Units	Subtopics
Waves	<ul style="list-style-type: none"> <li>- Waves in one dimension</li> <li>- Waves in two dimensions</li> <li>- Sound</li> </ul>
Nature of Light	<ul style="list-style-type: none"> <li>- Models, Laws and Theories</li> <li>- The Wave and Particle Models of Light</li> </ul>
Mechanics	<ul style="list-style-type: none"> <li>- Kinematics</li> <li>- Dynamics</li> </ul>
Fields	<ul style="list-style-type: none"> <li>- Gravitational Fields</li> <li>- Electric Fields</li> <li>- Magnetic Fields</li> <li>- Electromagnetism</li> </ul>

### Extra Help

Grade 11 Physics is an extensive course that covers many different topics and requires understanding rather than memorization. Students who are attending regularly and putting in effort will have no problems succeeding in this course.

Please use these opportunities to receive some individual help if and when you need it.

- Tuesdays and Thursday at lunch – Please let me know that you are planning on coming. These times are subject to change based on other commitments I have that week at lunch.
- Other times by appointment.

### Required Materials

3 ring binder, paper, dividers, pen/pencil, scientific calculator, graph paper

*Science is a very exciting subject that helps you learn about yourself and the world around you. Take advantage of this opportunity – you only get to live this year once! I look forward to learning with you!*

*~Mrs. Kornelsen*