

McCreary School 2025/2026

Physics 30S

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YEAR PLAN SUMMARY

COURSE INFORMATION

Course Code: 0123 Value Credit: 1.0 Duration: Semester 1 Classroom: Room 14 Prerequisites: Science 20F

COURSE TEXTBOOK

Physics: Concepts and Connections. Irwin

Publishing Ltd. 2002

COURSE TECHNOLOGY

Office 365

MS Teams: Physics 30S

SUPPLIES

• 3-Ring Binder

• Pencils, Erasers, & Pens

• Scientific Calculator

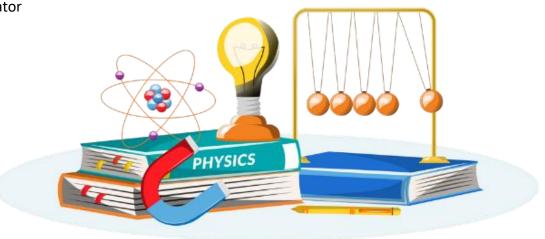
Loose Leaf

Graph Paper

Ruler

Highlighters

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



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 AND EXPECTATIONS

<u>Daily Classroom Expectations:</u> 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.

<u>Absent:</u> If you are absent, please connect with me to find out what you missed. YOU are responsible for 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.

<u>Extra Help:</u> Extra help will always be available when you need it. I am generally available before and after school, as well as at lunch hour. Please make arrangements with me if this is something you are needing. Help can also be available through MS Teams or email.

<u>Technology in the Classroom:</u> Students are encouraged to bring their school provided laptop with them to school every day. Cell phones will not be permitted during class time. Improper use of technology may result in a loss of certain privileges.

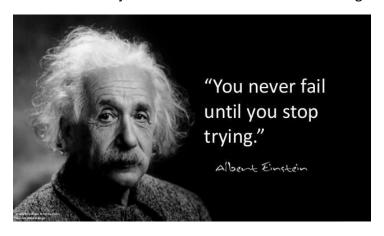
<u>Academic Dishonesty:</u> Academic dishonesty, including, but not limited to inappropriate collaboration, plagiarism, and cheating is a severe offence and will be dealt with according to the policy outlined in the school handbook.

<u>Late Policy:</u> 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."

ACADEMIC ASSESSMENT

Assessment Category	Assessment Item	Item Weight	Category Weight
Mechanics ➤ 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%
Fields ➤ 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%
Waves ➤ 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% 25%	22%
Final Exam	The final exam will take place in January. The details of the exam will be decided at a later date.	100%	30%

^{*} All assessment items are subject to revision based on our evolving circumstances.



BEHAVIOURAL ASSESSMENT

Students will receive a letter grade on their report cards for the following:

- *Personal Management:* Uses class time effectively; works independently; completes homework and assignments on time.
- Active Participation in Learning: Participates in class activities; sets learning goals.
- Social Responsibility: Works well with others; resolves conflicts appropriately; respects self, others and environment; contributes in a positive way.

ASSESSMENT GUIDELINES

<u>Homework:</u> 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.

<u>Assignments:</u> 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.

<u>Quizzes:</u> 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 guiz a standard formula sheet will be provided.

<u>Chapter Tests:</u> 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.

<u>Final Exam</u>: 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.