



ALTERNATIVE EDUCATION

Contact Information	Teacher Name: Site Phone Number: Teacher Email:
Prerequisite	A mark of at least 50% in Science 10.
Required Materials & Resources	• Four modules and eight assignment books • Media Reference Page • Textbook: Physics, Pearson, 2009 • Graphing calculator recommended, scientific calculator acceptable • Students are also required to use the www.learnalberta.ca website. User ID LA12 Password 2953 • Physics 20 data sheet

Course Overview

Physics 20 consists of four units of study, as outlined below. These units emphasize the nature of science, science and technology and science in societal and environmental contexts.

Unit	Topics of Study	Weighting
A. Kinematics	• Scalar/Vector quantities • Uniform motion • Uniformly accelerated motion • Two-dimensional motion	15%
B. Dynamics	• Newton's laws of motion • Inertia • Vector addition • Static and kinetic friction • Gravitational force • Newton's law of universal gravitation • Gravitational field	25%
C. Circular Motion, Work and Energy	• Uniform circular motion • Conservation of mechanical energy • Planetary and satellite motion • Work-energy theorem • Kepler's laws • Isolated systems • Mechanical energy • Power	30%
D. Oscillatory Motion and Mechanical Waves	• Oscillatory and Simple harmonic motion • Restoring force • Oscillating spring, pendulum • Mechanical resonance • Mechanical waves—longitudinal and transverse • Universal wave equation • Reflection • Interference • Acoustic resonance • Doppler effect	30%

Assessment	The student's grade will be calculated based on the following:	
	Coursework	20%
	Unit Evaluations – quizzes, exams, labs, projects	80%
	*Final Grade: 80% School awarded mark + 20% District Common Summative Assessment. Parents and students are encouraged to keep up to date on PowerSchool and contact their teacher if there are any issues.	
Important Note Regarding Assessment	A wide range of assessment information is used in the development of a student's final grade. In Edmonton Catholic Schools, individualized assessments provide specific information regarding student progress and overall performance in class. Assessment may vary from student to student, differentiating for various student needs. It should also be noted that not all assignments are used to determine the final grade, and that scale factors may have been used to determine the weight of individual assignments.	