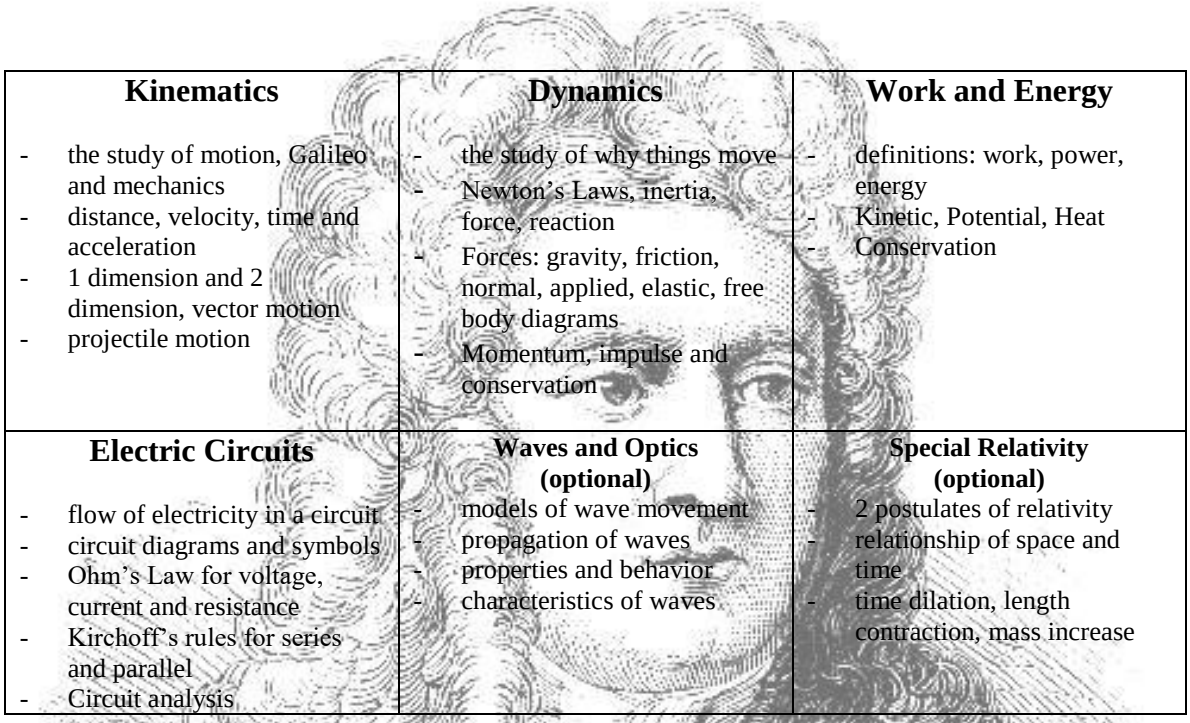
Wellington Secondary School
Physics 11: Course Outline – Mr. Elwood

Physics is the study of energy, its effects, uses and applications. This course focuses on problem solving in each of the following areas. A good foundation in algebra is needed for success in this course. The course is principally about the study of motion: kinematics, dynamics and energy.



Kinematics	Dynamics	Work and Energy
- the study of motion, Galileo and mechanics - distance, velocity, time and acceleration - 1 dimension and 2 dimension, vector motion - projectile motion	- the study of why things move - Newton's Laws, inertia, force, reaction - Forces: gravity, friction, normal, applied, elastic, free body diagrams - Momentum, impulse and conservation	- definitions: work, power, energy - Kinetic, Potential, Heat - Conservation
Electric Circuits	**Waves and Optics (optional)**	**Special Relativity (optional)**
- flow of electricity in a circuit - circuit diagrams and symbols - Ohm's Law for voltage, current and resistance - Kirchoff's rules for series and parallel - Circuit analysis	- models of wave movement - propagation of waves - properties and behavior - characteristics of waves	- 2 postulates of relativity - relationship of space and time - time dilation, length contraction, mass increase

Evaluation: Course work: this includes all of the daily assignments, quizzes, labs, worksheets and problems. This is the on-going evaluation of student progress in the course, it will be 50% of the student grade.

Unit exams: Each unit will be summarized in a unit exam based on the curriculum material covered in each section of the course. This will account for 30% of the student grade.

Final Exam: There is a final exam in this course (school based) covering all of the required course material. It will account for 20% of your final course mark.

Expectations:
Students are expected to arrive in class every day on time and prepared for the work assigned. You will need a scientific calculator, notebook and your brain.

Contact me at: selwood1@sd68.bc.ca. Student grades will be made available on the MyEd B.C. website, if that is not available they will be given timely paper updates.