

Physics 11

Course Outline

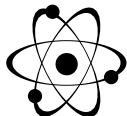
Tamanawis

Physics is the study of matter and energy and the relationship between them. This course covers a wide variety of physics topics, and provides opportunities for you to understand the concepts and apply them to everyday situations.

Topics Covered

$$d = v_0t + \frac{1}{2}at^2$$

1. Math Skills and Graphing
2. Kinematics
 - displacement, velocity and acceleration in one dimension
 - projectiles
3. Newton's Laws
4. Forces
 - forces of gravity, friction and elastics
4. Energy
 - work, potential energy, kinetic energy, thermal energy
 - law of conservation of energy
 - power and efficiency
5. Momentum
 - momentum and impulse
 - law of conservation of momentum, collisions
6. Special Relativity
7. Waves and Optics



Required Skills

Succeeding in Physics requires you to have a firm understanding of the following mathematical skills:

- scientific notation
- trigonometry
- metric conversions
- formula manipulation

Evaluation

- 50% Tests
- 10% Quizzes
- 40% Projects / Labs / Assignments

Final Exam – 25 % of final mark