

Physics

COURSE DESCRIPTION

Physics is a standards based lab course focused on how matter and energy are related, transferred, and conserved. Students will:

- Investigate the concepts of speed, velocity, acceleration, vectors, displacement, and projectile motion
- Explore and describe Newton's laws
- Investigate and demonstrate that energy exists in different forms, can be transformed, and is conserved
- Explore potential and kinetic energy
- Describe how changes in energy can result in physical changes in matter, including density, volume, and pressure
- Investigate and describe the relationship between electric currents and magnetic fields
- Explore and describe the characteristics of the electromagnetic spectrum
- Study the structure and composition of the universe

Grades 11-12

Term/Credit: Two semesters = 2 credits

Prerequisite: Successful Completion of Environmental Foundations