



Course Description: Physics

This is a college preparatory course in which students learn the fundamental concepts in physics. The course will emphasize the development of an intuitive understanding of physic principles, as well as problem solving with the use of mathematics.

Semester One Topics:

1. Mechanics
2. Linear Motion
3. Projectile Motion
4. Newton's 3 Laws of Motion
5. Momentum
6. Circular Motion
7. Rotational Mechanics
8. Universal Gravitation

Semester Two Topics:

1. Heat Transfer
2. Thermodynamics
3. Vibrations and Waves
4. Sound
5. Light
6. Color
7. Reflection and Refraction
8. Electrostatics
9. Electric Fields, Potential, and Current
10. Electric Circuits
11. Magnetism
12. Electromagnetic Induction

Textbook: Holt Physics. Serway, Faughn. Holt, Rinehart and Winston, 2009.

Prerequisites: Chemistry, Algebra 2

High Bluff Academy is accredited by the Western Association of Schools and Colleges (WASC). The above course is approved by the University of California system (A-G) and the National Collegiate Athletic Association (NCAA).