**Honors & Academic Physics Syllabus 2015-16**

**Unit 1: Waves**

Lesson 1: Basics of Waves

Lesson 2: Sound

Lesson 3: Introduction to Light (EM Waves, Duality)

Lesson 4: Reflection of Light & Mirrors

Lesson 5: Data Analysis

Lesson 6: Refraction of Light & Lenses

MUSICAL INSTRUMENT PROJECT

UNIT EXAM: WAVES

**Unit 2: Electricity & Magnetism**

Lesson 1: Electrostatics

Lesson 2: Electric Fields

Lesson 3: Simple Circuits

Lesson 4: Series & Parallel Circuits

Lesson 5: Magnetism

SPEAKER PROJECT

UNIT EXAM: ELECTRICITY & MAGNETISM

**Unit 3: Mechanics**

Lesson 1: Kinematics-Motion in 1 D

Lesson 2: Forces – 1 D

Lesson 3: Vectors

Lesson 4: Kinematics-Motion in 2 D

Lesson 5: Work & Energy

Lesson 6: Linear Momentum

ROLLER COASTER PROJECT

FINAL EXAM (THEORY AND PRACTICAL)