

**Mansfield Independent School District**  
**Scope and Sequence**  
**AP Physics**

**Weeks 1-6 Mechanics**

- Introductions, physics, linear motion
- Linear motion, projectile motion
- Newton's laws
- Momentum and energy, circular motion
- Center of gravity, universal gravity, satellite motion.
- Relativity

**Weeks 7-9 Heat**

- Temperature, heat, expansion, heat transfer
- Change of phase, thermodynamics
- Finals

**Weeks 10-12 Sound and Light**

- Vibrations and waves, sound
- Light, color, reflection/refraction
- Lenses, diffraction and interference

**Weeks 13-15 Electricity and Magnetism**

- Electrostatics
- Electric fields and potential
- Current and circuits

**Weeks 16-17 Atomic and Nuclear Physics**

- Quantum mechanics
- Radioactivity, fission and fusion
- Finals

Each unit (sometimes each section or group of units) will have a written exam as well as an individual or group project.