

## AP Physics 2 Syllabus (Algebra-Based)

Unit No.	Unit Title	Estimated Hours	Exam Weighting	Key Topics Covered
1	Fluids	10 hours	10-12%	Pressure, Pascal's Principle, Buoyancy, Archimedes' Principle, continuity equation, Bernoulli's equation
2	Thermodynamics	10 hours	12-18%	Temperature, heat transfer, specific heat, calorimetry, First Law of Thermodynamics, PV diagrams
3	Electric Force, Field, and Potential	10 hours	18-22%	Electric field and potential, field lines, point charges, electric potential energy, equipotential lines
4	Electric Circuits	10 hours	10-14%	Resistors, capacitors, series and parallel circuits, Kirchhoff's laws, RC circuits
5	Magnetism and Electromagnetic Induction	10 hours	10-12%	Magnetic fields, Lorentz force, Faraday's Law, Lenz's Law, EMF, generators
6	Geometric and Physical Optics	10 hours	10-12%	Reflection, refraction, lenses, mirrors, wave optics, diffraction, interference
7	Quantum, Atomic, and Nuclear Physics	10 hours	10-12%	Photoelectric effect, nuclear reactions, radioactive decay, energy-mass equivalence ( $E=mc^2$ )