

Mid-IB Revision Course Content – HL Physics

A – Space, time, and motion

- A1 Kinematics
 - Linear and Projectile motion
- A2 Forces
 - Types of forces and calculations
 - Momentum
 - Circular motion
 - Hooke's Law
 - Friction, Drag and Buoyancy
- A3 Work, Energy and Power
- A4 Rigid body mechanics
 - Rotational motion
 - Inertia and Torque
- A5 Galilean and Special Relativity
 - Galilean Relativity
 - Spacetime graphs

B – The particulate nature of matter

- B1 Thermal energy transfers
 - Thermal energy
 - Luminosity and Wiens Law
- B2 Greenhouse effect
 - Climate model
- B3 Gas Laws
- B5 Current and Circuits

C – Wave behaviour

- C1 Oscillations and SHM (not mathematical)
- C2 Wave model
- C3 Wave properties
 - Wave properties
 - Superposition

D – Fields

- D1.1 Gravitational force and field only.
- D2.1/2 Electric and Magnetic fields
- D3 Motion in electromagnetic fields

E – Nuclear and quantum physics

- E1 Structure of the atom
 - The atom
 - Atomic energy levels
- E3 Radioactivity
 - Radioactive decay + calculations
 - Binding energy
 - Nuclear energy levels
- E5 fusion and stars
 - Stellar distances only