

Physics 30 Course Outline

Unit 1: Kinematics and Dynamics

- understanding motion
- vector and scalar quantities
- distance and displacements
- speed and velocity
- acceleration
- Newton's laws of motion

Unit 2: Mechanical Energy

- work
- power
- kinetic energy
- gravitational potential energy

Unit 3: Electricity

- applications
- current and potential difference
- current, electric potential difference and Ohm's law
- electric circuits
- Kirchhoff's laws
- series, parallel, and combination circuits
- electric power and energy

Unit 4: Nuclear Physics

- natural radioactivity
- nuclear fission
- nuclear fusion
- nuclear reactors

Evaluation

Tests	60%	
Research Paper	20%	These 3 categories account for 60% of your overall mark
HIA	20%	

This is a departmental course and you will be writing a comprehensive final departmental examination as set by the dep't of education. This exam accounts for 40% of your overall mark.