GRADE 11 PHYSICS

COURSE OUTLINE

UNIT TOPIC	DURATION	AREAS TO BE COVERED	ASSIGNMENTS AND TESTS
Pressure	4 weeks	1. Define pressure. 2. Use the formula, pressure = force/area to perform calculations. 3. Liquid pressure characteristics and calculations. 4. Archimedes principle.	
Kinetic Theory	1 week	Appreciate the kinetic theory concept.	Assignment
Gas Laws	1week	Understand and apply the gas laws.	Assignment
Heat Capacity Specific Heat Capacity	3 weeks	Understand the concept of heat capacity and specific heat capacity.	Assignment Test
Latent Heat	1week	Understand the concept of latent heat.	Assignment
Heat Transfer Methods	1 week	Be familiar with methods of thermal energy transfer.	
Static Electricity	1 week	Understand electrostatic phenomena.	Assignment
Current Electricity	4 weeks	• Electrical symbols. • Electrical quantities and units. • Ohms Law. • Series and Parallel circuits. • Electrical Power. • AC versus DC supply. • Diodes and rectification.	Assignment Test

Magnetism	1 week	Understand magnetic phenomena.	
Electromagnetism	2 weeks	• Understand electromagnetic phenomena. • Electromagnets. • Motors. • Generators. • Transformers.	Assignment
Logic Gates	1 weeks	Be aware of digital electronics in everyday life.	
Reflection & Refraction	3 weeks	Understand the reflection and refraction of light waves.	Assignment
Lenses	1 week	Be familiar with lenses and optical instruments.	Assignment
Waves	1 week	Understand that wave motion is a means of energy transfer.	Test
Electromagnetic Waves Sound	1 week	• Be familiar with the electromagnetic spectrum. • Be familiar with the production and propagation of sound waves.	Assignment
Radioactivity	1 week	• Appreciate atomic theory development. • Understand differences in atomic structure. • Be familiar with radioactive particles and their characteristics.	Assignment
Nuclear Energy	1 week	Calculate nuclear energy.	Assignment