

St. Mary's College

FORM 5

Subject: PHYSICS CSEC

COURSE OUTLINE 2022

TERM 1

Proposed Date/Week	Unit/Section	Topic	Modules
1 - 3	WAVES & OPTICS	WAVE MOTION & WAVE PHENOMENA	1. Types of Wave 2. Wave Parameters 3. Reflection, Refraction, Diffraction 4. Superposition
		SOUND	1. Production and Propagation 2. Speed of Sound 3. Audio Frequencies
		ELECTROMAGNETIC WAVES	4. Electromagnetic Waves 5. Waves or Particles 6. Rays of Light 7. Laws of Reflection 8. Image in a Plane Mirror 9. Refraction 10. Laws of Refraction 11. Critical Angle and Total Internal 12. Dispersion
		OPTICS	13. Action of Lenses 14. Image Formation 15. Optical Instruments
4	SECTION E ELECTRICITY & MAGNETISM	ELECTROSTATICS	1. Electric Charge 2. Electric Fields
5 - 8		CURRENT ELECTRICITY	3. Current Electricity 4. Alternating Current
		ELECTRICAL QUANTITIES	5. Power and Energy
9		CIRCUITS & COMPONENTS	6. Circuit Diagrams 7. Cells
10			8. I-V Relationships 9. Resistance 10. Electricity in the Home
		ELECTRONICS	11. Rectification

TERM 2

Proposed Date/Week	Unit/Section	Topic	Modules
1		MAGNETISM	12. Permanent Magnets
			13. Magnetic Forces
2-3		ELECTROMAGNETISM	14. Electromagnetic Fields
			15. Electromagnetic Force
			16. Motors
			17. Loudspeakers
			18. Induced e.m.f.
			19. Transformers
4	SECTION F THE PHYSICS OF THE ATOM	MODELS OF THE ATOM	1. Models of the Atom
5		STRUCTURE OF THE ATOM	2. Particles in the atom
6-8		RADIOACTIVITY	3. Radioactive Emissions
			4. Half Life
			5. Radioisotopes
9		NUCLEAR ENERGY	6. Nuclear Energy
10-13		REVISION	

TERM 3

Proposed Date/Week	Unit/Section	Topic	Modules
1	Mechanics/Waves	REVISION	
2	Thermal/Kinetic Theory	REVISION	
3	Electricity/Magnetism/Atomic	REVISION	