

Sai Kung Sung Tsun Catholic School (Secondary Section)  
S5 Physics Teaching Schedule and Evaluation (2020-2021)

Topic	List of Experiments	Teaching Period
Wave Motion		
13. Wave Motion	Transverse waves Longitudinal waves	0.5
14. Reflection, Refraction and Diffraction	Straight and circular waves Laws of reflection Refraction of water waves Diffraction of water waves	1.5
15. Interference and Stationary Waves	Superposition of pulses Transverse stationary waves Particle motion in a stationary wave Interference of water waves	2
16. Light and Sound	Double slit experiment Plane diffraction grating	2
17. Reflection of Light	Laws of reflection Plane-mirror image	2
18. Refraction of Light	Refraction phenomena The laws of refraction Total internal reflection Prisms	2
19. Lenses	Convex and concave lenses Convex lens images Concave lens images Measuring focal length Lens formula and graphs	3
Electricity and Magnetism		
20. Electrostatics	Bending a stream of water Charging a metal tray Gold-leaf electroscope	3
21. Circuit and Power	Finding the I-V characteristic curve Effects of length and thickness on the resistance of a wire Effect of temperature on resistance Determine the electrical power of a	3

	bulb Heating effect of electric current	
22. AC and Domestic Electricity	Effective value of a sinusoidal voltage	2
23. Electromagnetism	Visualizing magnetic field patterns Magnetic field patterns around different current-carrying conductors Current balance	3
24. Electromagnetic Induction	Electromagnetic Induction Changing magnetic field Induced e.m.f. of a simple generator	3
Radioactivity and Nuclear Energy		
25. Radiation and Radioactivity	Range of $\alpha$ radiation in air Penetrating power of nuclear radiations	3
26. Rate of Decay and Uses of Radionuclides		3
27. Nuclear Energy		3

Evaluation:

Result (100%) = Examination (50%) + Course Work (50%)

Term Result (100%) = First Term result (50%) + Second Term result (50%)

\* Course Work (100%) = Test result (50%) + Online test result (10%) Homework and Laboratory Report (30%) + Electronic homework (10%)