

SCOPE AND SEQUENCE STATEMENT: YEAR 12 PHYSICS 2025

TERM 4 - 2024	1	2	3	4	5	6	7	8			
OVERALL TOPIC	YR 11 COURSE		Module 5: Advanced Mechanics								
OVERVIEW			Students investigate complex kinematic situations involving multiple dimensions and varying force components. Students study projectile motion and circular motion, among others. Depth study – 6 hours								
OUTCOMES			PH11/12.1, PH11/12.3, PH11/12-4, PH11/12-5, PH11/12-6, PH11/12-7, PH12-12								
ASSESSMENT											
	6 WEEKS 24 HOURS										
TERM 1 - 2025	1	2	3	4	5	6	7	8	9	10	11
OVERALL TOPIC	Module 5: Advanced Mechanics (continued)		Module 6: Electromagnetism							Module 7: The Nature of Light	
OVERVIEW			Students investigate the interactions that take place between charged particles and electric/magnetic fields, including their application in electricity production and their uses in motors. Depth study – 4 hours								
OUTCOMES			PH11/12-1, PH11/12-2, PH11/12-3, PH11/12-4, PH11/12.5, PH11/12-6, PH11/12-7, PH12-13								
ASSESSMENT	AT1: Practical/Depth Study – 25% (Week 3)							AT2: In Class Theory Data Analysis- 25% (Week 9)			
	11 WEEKS 44 HOURS										
TERM 2 - 2025	1	2	3	4	5	6	7	8	9		
OVERALL TOPIC	Module 7: The Nature of Light (continued)					Module 8: From the Universe to the Atom					
OVERVIEW	Students investigate theories of light and the significant and profound modifications as a result of the quantum theory. The properties of light and their consequences are explored in relativity and applications of the quantum theory. Depth study – 5 hours					Students explore the theories of the probable origins of the universe and the machinations of its components					
OUTCOMES	PH11/12-1, PH11/12-2, PH11/12-3, PH11/12-4, PH11/12.5, PH12-14					PH11/12-5, PH11/12-6, PH11/12-7, PH12-15					
ASSESSMENT						AT3: Research and Information Processing - 20% (Week 9)					
	9 WEEKS 36 HOURS										
TERM 3 - 2025	1	2	3	4	5	6	7	8	9	10	
OVERALL TOPIC	Module 8: From the Universe to the Atom				Module 8: From the Universe to the Atom		Revision				
OVERVIEW	(cont.)		TRIAL HSC EXAMS		(cont.)						
OUTCOMES											
ASSESSMENT			AT4: Trial Examination 30%								
	10 WEEKS 40 HOURS										

TOTAL COURSE HOURS: 144 hours