Year: 12 – Teacher 1
Subject: Physics IAL Edexcel

Term	Week	Focus	Summary	Learning Outcomes	Learning skills
Term 1.1	1	Uniformly Accelerated Motion	Use and application of equations for uniformly accelerated motion.	Use your knowledge to apply the equations for uniformly accelerated motion in one dimension.	Analyzing, Critical Thinking
	2	Motion Graphs	Drawing and interpretation of displacement-time, velocity-time and acceleration-time graphs.	Use your knowledge to draw and interpret displacement-time, velocity-time and acceleration-time graphs.	Analyzing, Critical Thinking, Linking
	3	Physical Quantities & Scalars/Vectors	Application scalar and vector quantities and examples of each type of quantity.	Use your knowledge to define scalar and vector quantities and state examples of each type of quantity and recognise vector notation.	Critical Thinking, Problem Solving
	4	Vector Resolution & Projectile Motion	Resolution of vectors and understanding of the independence of vertical and horizontal motion of a projectile.	Use your knowledge to resolve a vector into two components at right angles to each other and understand projectile motion.	Analyzing, Problem Solving
	5	Vector Resolution & Projectile Motion	Resolution of vectors and understanding of the independence of vertical and horizontal motion of a projectile.	Use your knowledge to resolve a vector into two components at right angles to each other and understand projectile motion.	Analyzing, Problem Solving
	6	Force Diagrams & Newton's Laws	Drawing of free-body force diagrams and use of Newton's second law of motion.	Use your knowledge to draw and interpret free-body force diagrams and use the equation $\sum F = ma$.	Critical Thinking, Problem Solving
	7	Freely-Falling Object	Practical to determine the acceleration of a freely-falling object.	Practical to determine the acceleration of a freely-falling object.	Practical to determine the acceleration of a freely-falling object.

Term 1.2	**1**	Newton's Third Law	Application of Newton's third law of motion and the properties of force pairs.	Use your knowledge to state and apply Newton's third law of motion and know the properties of pairs of forces in an interaction between two bodies.	Critical Thinking, Problem Solving
	2	Momentum	Application of momentum and its conservation.	Use your knowledge to define momentum as p = mv and apply the principle of conservation of linear momentum.	Analyzing, Critical Thinking, Problem Solving
	3	Moment of Force & Equilibrium	Application of the moment of a force and the principle of moments for equilibrium.	Use your knowledge to apply the equation for the moment of a force and apply the principle of moments to an extended body in equilibrium.	Analyzing, Critical Thinking, Problem Solving
	4	Work & Energy	Application of work and energy.	Use your knowledge to apply the equation for work and the equations for kinetic and gravitational potential energy.	Analyzing, Problem Solving
	5	Conservation of Energy & Power	Application of the principle of conservation of energy and the calculation of power.	Use your knowledge to apply the principle of conservation of energy and be able to use the equations relating power, time and energy transferred.	Critical Thinking, Problem Solving
	6	Midterm Review and Exam	Review of key concepts and Midterm Examination.	Demonstrate understanding of the topics covered so far.	Critical Thinking, Problem Solving, Meta-cognition
	7	Midterm Review and Exam	Review of key concepts and Midterm Examination.	Demonstrate understanding of the topics covered so far.	Critical Thinking, Problem Solving, Meta-cognition