Lesson Plan for Week 3: Sept 26-30 **Grade: 11A** Course / Code: SPH3U Teacher: Ali Jama Monday **Tuesday** Wednesday **Thursday** Unit/ Lesson **Unit 1: Kinematics Unit 1: Kinematics Unit 1: Kinematics Unit 1: Kinematics** Motion involves a change in the Motion involves a change in the Big Ideas Motion involves a change in the position Motion involves a change in the position of position of an object over time. of an object over time. position of an object over time. an object over time. Overall **B1**. analyze technologies that apply concepts Expectations concepts related to kinematics, and concepts related to kinematics, and assess concepts related to kinematics, and related to kinematics, and assess the assess the technologies' social and the technologies' social and assess the technologies' social and technologies' social and environmental environmental impact; environmental impact; environmental impact; impact; **B2.** investigate, in qualitative and **B2**. investigate, in qualitative and **B2.** investigate, in qualitative and B2. investigate, in qualitative and quantitative terms, uniform and non-uniform quantitative terms, uniform and quantitative terms, uniform and quantitative terms, uniform and non-uniform linear motion, and non-uniform linear motion, and solve non-uniform linear motion, and solve linear motion, and solve related problems; related problems; related problems; solve related problems; **B3.** demonstrate an understanding of **B3**. demonstrate an understanding of **B3.** demonstrate an understanding of **B3**. demonstrate an understanding of uniform and non-uniform linear motion, in uniform and non-uniform linear motion, uniform and non-uniform linear uniform and non-uniform linear one and two dimensions motion, in one and two dimension motion, in one and two dimension in one and two dimensions Specific B2.3 use a velocity–time graph for B2.5 solve problems involving distance, B3.1 distinguish between the terms B2.8 use kinematic equations to solve problems related to the horizontal and constant acceleration to derive the constant, instantaneous, and average position, and displacement (e.g., find **Expectations** equation for average velocity [e.g., vav total displacement using a scale vector with reference to speed, velocity, vertical components of the motion of a = $(v_1 + v_2)/2$ and the equations for diagram and vector components, and projectile (e.g., a cannon ball shot and acceleration, and provide displacement [e.g., $\Delta d = ((v_1 + v_2)/2\Delta t,$ compare it to total distance traveled) [AI, examples to illustrate each term. horizontally off a cliff, a ball rolling off a $\Delta d = v_1 \Delta t + \frac{1}{2} a (\Delta t^2)$, and solve C1 table, a golf ball launched at a 45° angle to simple problems in one dimension the horizontal) [AI, C] using these equations [AI Learning Motion in two dimensions Goals Motion in two dimensions Motion in two dimensions

Success Criteria

Instructional Strategies	Lecture on motion in two dimensions. using a scale diagram and algebraic approach. Examples will be analyzed and solved.	Continue with the previous lesson to solve more problems related to algebraic approach.		Projectile Motion
Assessment & Evaluation	Class Work [AAL]	Class Work [AAL]	Class Work [AAL]	Class Work [AAL]
Homework / Class Work	Questions 1-9on page 65 textbook		Questions 1 and 2 on page 71 textbook.	Questions 1 and 2 on page 78 textbook.
Materials & Resources	Nelson Physics 11 [Textbook]	Nelson Physics 11 [Textbook]	Nelson Physics 11 [Textbook]	Nelson Physics 11 [Textbook]