**SPH3U0 Unit 3: Kinematics Mr. Nestor October 2019**

Chapter 1: Constant Velocity Represents Uniform Motion **Pearson Physics Source 11**

Chapter 2: Acceleration Causes a Change in Velocity

Chapter 3: A Projectile is an Object Moving in a Vertical Plane, Under the Influence of the Force of Gravity

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| Day & Date | Topic | Assignment |
| Day 01  Wed. Oct. 16 | **Scalars and Vectors**  •Scalar versus Vector Quantities  •Distance, Displacement, Position |  |
| Day 02  Thu. Oct. 17 | **Position and Displacement in 1- D**  •Speed, Average Speed, Velocity | Handout :Distance and Speed Problems |
| Day 03  Fri. Oct. 18 | **Motion in 1- Dimension**  •Displacement as Sum of Displacements  •Displacement as Change of Position | Handout: Position and Displacement Practice |
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| Day 04  Mon. Oct. 21 | ***Supply Day***  **Motion in 1-D Practice**  •Textbook Reading  •Textbook Practice | 1.1 P#1-3 pg. 8,  1.1 S#3 pg. 13  1.2 P#1 pg. 16 |
| Day 05  Tue. Oct. 22 | ***Supply Day***  **Displacement and Velocity Problems**  •GRASP Method | Handout: Displacement and Velocity Problems |
| Day 06  Wed. Oct. 23 | **Motion in 2-Dimensions**  •Using Scale Drawings  •Using Trigonometry | Handout  2D Motion Assignment  – Due Next Tuesday |
| Day 07  Thu. Oct. 24 | **Accelerated Motion**  •Calculating Uniform Acceleration | 2.1 S#4,5 pg 40  Acceleration Worksheet |
| Day 08  Fri. Oct. 25 | **Early Release**  **Accelerated Motion Practice**  •Slope – Instantaneous Velocity | 2.1 S#4,5 pg 40 |
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| Day 09  Mon. Oct. 28 | **Smart Cart Activity** | In-Class Investigation Worksheet |
| Day 10  Tue. Oct. 29 | ***Motion Quiz 1***  ***Complete Smart Carts***  ***2D Motion Assignment Due*** |  |
| Day 11  Wed. Oct. 30 | **Graphs for Uniform Motion**  •Position-Time and Velocity-Time  Slope and Area Analysis | Graph Analysis Booklet #1  Pages 1-4, Pgs: 1-3  2.2 P#1 pg 42 |
| Day 12  Thu. Oct. 31 | **Graphs for Uniform Acceleration**  •Position to Velocity to Acceleration | Graph Analysis Booklet #2 |
| Day 13  Fri. Nov. 01 | **Area Analysis of V-T graphs: V-T to D-T**  **Motion Graph Analysis Summary** | Graph Analysis Booklet #2 pg. 4  Graph Analysis Booklet #3 |
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| Day 14  Mon. Nov. 04 | **Graph Analysis Practice**  •Complex Graph Analysis  ***Motion Quiz 2-Graph Analysis*** | Practice Worksheet |
| Day 15  Tue. Nov. 05 | **Famous Five Equations for Acceleration** | 2.3 P1,2 pg 49. P1,2 pg50,  P1,2 pg 51 P1,2 pg52, P1,2 pg 53 |
| Day 16  Wed. Nov. 06 | **Supply Day**  **Famous Five Equations Practice** | Famous Five Practice Worksheet |
| Day 17  Thu. Nov. 07 | **Acceleration due to Gravity** | 3.1 P#1-3 pg 61 |
| Day 18  Fri. Nov. 08 | **Gravity Practice** |  |
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| Day 19  Mon. Nov. 11 | **Acceleration Lab** | **Lab Report Due Tues Nov 13** |
| Day 20  Tue. Nov. 12 | **Kinematics Review** | 3.1 S 4, 7,16\*, 17\*,18\* pg 66  \* Challenging Problems! |
| Day 21  Wed. Nov. 13 | **Kinematics Test** |  |
| Day 22  Thu. Nov. 14 | ***Mousetrap Car Project*** | **Video & Report Due tbd** |
| Thu. Nov. 15 | **PA Day** |  |