***Lesson Plans for the Week of: 12/5/16 Teacher: Hough Course: Physics Period: 3***

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| Elements of  a Lesson | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| Objective/  Focus/  Essential  Question | PH.2e; 5c,d,e  Review for Test | PH.2e;5c,d,e  Test about Newton’s 2nd Law and projectiles | PH.2a,6a  --apply the kinetic energy equation in appropriate word problems  --Differentiate between the types of potential energy | PH.2a,6a  Apply the potential energy equations in appropriate word problems | PS.2a,e; 5c  Calculate net force on an object in 2 dimensions |
| Lesson/Act.  Type of Presentation | Small groups:  Review for test  --4 practice problems to solve (with discussion): Break into 2 groups:  a) projectile problem and 1D F=ma problem (forces in 2 directions)  b) 2D net force problem and one direction F =ma problem  Groups will present results and reasoning  Whole group:  --Review vocabulary | Individual:  Test  Background for students who will be at blood drive  Textbook:  a)Define kinetic energy p. 158  equation  b) from p. 163-164:  -- define potential energy  -- define gravitational potential energy and elastic potential energy; write equations | Whole group:  Model a sample problem using kinetic energy p. 181 #19-20  Differentiate between the two types of potential energy:  --grav. PE  --elastic PE | Whole group:  Apply word problems utilizing potential energy  Model Sample problem p. 181 #23b  Focus on the fact that x in PEelas is the difference between rest position and stretched (or compressed) position  Individual:  Practice applying potential energy equations: p. 181#23a,c; p. 166#1 | Whole group:  Model how to find the net force on an object that is experiencing 4 forces in 2 dimensions—magnitude and direction  Small groups:  Students solve 2D net force problems  p. 143#10-11 |
| Evaluation |  |  |  | Student work |  |
| Extension/  Homework |  |  | p. 160 #2-4; p. 166 #2; p. 181 #24, 25 |  |  |

Materials:

Monday: Review Guide

Tuesday: Test

Wednesday: Textbook; OneNote; spring scale or slinky

Thursday: Textbook; OneNote; spring scale or slinky

Friday: