HON PHYSICS

SYLLABUS

January 27 - 30, 2020

**MON:** **LAB:** Torque

**HW:** Torque I Worksheet

Read chapter 7, pg. *226 –* 231

**Web post due by Saturday, 8:00 A.M.**

**TUE:** Discuss chapter 7, pg. *226 –* 231

“Circular Motion”

**HW:** Circular motion worksheet **I**

Print & Read **LAB:** Centripetal Force

**WED:** **LAB:** Centripetal Force

**HW:**

**THU:** Discuss Vertical Circular Motion

Practice circular motion problems

**HW:** Circular motion worksheet **II**

***King of the Hill*** *CAR!!!*

**Web post due by Saturday, 8:00 A.M.**

**FRI:** No Class – *Parent Teacher Conferences*

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***King of the Hill Project*** *cars due Monday. February 3*

***King of the Hill Project*** *RACE Tuesday. February 4*

***TEST*** *on chapter 7 Friday February 7*

I choose kindness… I will be kind to the poor, for they are alone. I will be kind to the rich, for they are afraid. And kind to the unkind, for such is how God has treated me.  *Max Lucado*

***King of the Hill Project Overview***

**Step 3:** Make a practice vehicle that runs at least 10 cm - *Due Monday, January 27*

* This vehicle cannot be battery operated, etc., but otherwise it does not have to follow any of the guidelines of the King of the Hill Project. It can be a draft model of your project car, but it doesn’t have to be.
* It may be as simple or as complicated as you like, but it must run 10 cm without human assistance.

**Step 4:** Construct King of the Hill Project car - *Due Monday, February 3*

* This car must follow exactly the project guidelines. *Pay particular attention to size guidelines!*
* Give yourself PLENTY of time to construct your car and to fix small and large things that will break, spin out, snap, flip, or just plain not work.
* You must demonstrate that your car can run at least 10 cm; however, you may take your car home to make final adjustments before the next day competition.

**Step 5:** King of the Hill Competition – *Due Tuesday, February 4*

* Your car must be ready to run 7 minutes after the bell for class.
* Also bring to class a final schematic of your car with the parts labeled, including what the parts are made from. More than one view might be necessary to show the “engine” of the car and how it works Also include a description of how your car runs and the physics principles behind its design.
* Bring plenty of spare parts!
* In addition to the King of the Hill competition, there will be a race for speed and a race for distance.