Physics: Forces & Motion Syllabus (Spring 2021/Quarter 4) Richard Aspinall - Team Katahdin

For our 4th Quarter <u>Physics</u> theme, the "Forces & Motion" class emphasizes the fundamental concepts of Physics. Areas of study and activities will include laboratory skills and problem solving, scientific measurements, as well as motion, forces, and Newton's Law of Motion.

A general knowledge of Mathematics is required throughout the course.

Students will have a variety of assessments which will include homework assignments, quizzes/tests, labs (covid 19 permitting) and classroom sharing & presentations.

Essential Questions:

- 1. What do we mean by "Forces" and what are the effects of forces on the "Motion" of objects
- 2. How is time and distance used to calculate speed or velocity?
- 3. How do Newton's laws affect your daily lives?

Next Generation Science Standards - Physics

PS1: Matter & Its Interactions Forces & Motion

PS2: Motion & Stability- Forces & Interactions Forces & Motion

Class Structure and Grading:

Quizzes, Tests & Assessments & Labs 50%

Some of the work for this class will require students to complete individual and/or group assignments and projects (there will not be any group assignments this quarter). In the future, when students work in groups, they will receive an individual grade. Quizzes and tests will be given from time to time with adequate opportunity for student preparation and study provided.

Homework/Classwork 50%

Homework assignments provide needed background information for activities to follow, and to enhance lab work. Homework is to be turned in on time for credit to be given. Unless due to absence or unforeseen circumstances, late work (passed in on the next respective Black or Gold Day) will only be graded up to a score of 80, afterwards it will not be accepted for credit (N - 50).

Class and Work Expectations/HOWL Rubric

Using our HOWL (Habits of Work & Learning) Rubric, students will also be assessed on class participation, time management and punctuality, as well as other important topics (respect, responsibility and perseverance) to assist with students' personal growth & learning.

Class and Work Expectations

Students are expected to arrive on time and prepared each day. They are also expected to turn in work on the day it is due, except in the case of absence. If there are special circumstances that will prevent a student from completing work by the due date, it the student's responsibility to talk to the teacher before the work is due. If a student misses school, it is his/her responsibility to speak to the teacher immediately upon return to school to find out what was missed and when the missed work will be due.