

## AP Physics C Summer Assignment

Welcome to AP Physics C! This summer you will be reviewing some calculus and basic motion concepts. Motion is foundational to the topics we will be covering this year in physics. You may have some familiarity with these topics from other science or math classes, but the goal is to have all of you at the same base level of understanding when we begin our year in September. This work will be due the first week of classes and will be assessed after a short review. If you have any questions, please email me.

\*You will be getting a textbook in September, so all learning resources are included in these assignments.\*

### *I. Khan Academy:*

#### *1) Calculus Review*

##### *a) Derivatives*

<https://www.khanacademy.org/math/calculus-1/cs1-derivatives-definition-and-basic-rules>

##### *b) Integrals*

<https://www.khanacademy.org/math/calculus-1/cs1-integrals/cs1-accumulations-of-change-introduction/v/introduction-to-integral-calculus>

#### *2) 1 Dimensional Motion*

<https://www.khanacademy.org/science/physics/ap-physics-1/ap-one-dimensional-motion>

Review the calculus lessons as needed. For one dimensional motion work through the 6 lesson sets with videos and questions. This work is foundational and we will be revisiting these concepts throughout the year.

### *II. Read "The Origins of the Field Concept in Physics" by Ernan McMullin*

[http://physics.gmu.edu/~rubinp/courses/416/pip\\_fields.pdf](http://physics.gmu.edu/~rubinp/courses/416/pip_fields.pdf)

Write a two page single-spaced summary - in your own words.

**DO NOT WAIT UNTIL THE LAST MINUTE.** You will benefit much more from doing a little bit throughout the summer and letting the concepts have time to sink in.

Thank you and have a great summer!

**Dr. S**

