

## Dr. Hood's Summer Assignment for c/o 2020 AP Physics C students

Go to [edx.org](https://www.edx.org) and set up an account – it's free!

Search for, find and e+roll in *On-Ramp to AP Physics C: Mechanics* – it's free!

This course is self-paced. It starts June 1, 2019.

This course is intended for high-school students who have taken an introductory-level physics course, acquired some background in Mechanics and intend to take a more advanced course – for instance, AP Physics C. The course will help refresh and strengthen fluency with mathematical tools and fundamental topics in Mechanics: Kinematics, Newton's laws and Laws of Conservation. The last unit of the course contains a comprehensive Final Exam. **Students who complete this mini-course will be well-prepared to tackle more advanced course material in the fall.** <sup>[SEP]</sup> You will need Calculus for your actual AP Physics C course but not for this summer course. The purpose of this course is to help you achieve success in your AP Physics C Mechanics course at MAST Academy.

Prerequisites:

- Background in a course like Dr. Hood's Honors Physics! (
- Fluency with basic algebra, trigonometry and vector operations.

What you'll learn: (

- Algebra/trigonometry skills for an advanced Mechanics course (
- Kinematics of motion with constant acceleration (
- Newton's laws and their application in problem-solving (
- Laws of conservation of energy and momentum and their application in (problem-solving (
- Basic information about the AP Physics C Mechanics course and Exam

If you complete at least 80% by the first day of school then you will start Dr. Hood's AP Physics C course in the fall of 2019 with five As in the gradebook! If you don't, then in addition to your regular classwork and homework, you will need to complete at least 80% of this course by Wednesday August 21 (but not get the five freebie As)! If you don't complete at least 80% of this course by Friday August 23 then you'll get 5 Fs in the gradebook and the opportunity to take a different non-physics class, with someone else...

Course description:

<https://www.edx.org/course/ramp-ap-physics-c-mechanics-weston-high-school-mechc101x#>