

Physics 3 Syllabus

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Textbook: OpenStax College Physics

This textbook can be obtained free online from openstax.org. The physics is algebra-based and the book is relatively straightforward and accessible to high school and middle school students.

Material Covered

This course reviews all of mechanics to prepare the students to take the $F=ma$ exam, and reexamines that material to find shortcuts to solve those problems now that the students have a better understanding of the topics.

Class Structure

Each class day will focus on one or two topics from mechanics. A topic will be quickly reviewed, and then students will solve problems relating to that topic. We will review each problem as it is completed. Problems will be taken from various sources, but will primarily be from previous $F=ma$ exams.

Schedule

The schedule for this course varies depending on where the students need the most practice. Typically, emphasis is placed on stability problems, collisions, angular momentum, energy, and Kepler's laws.

On the last day, we will take an $F=ma$ exam.