

Physics Syllabus

Course Description:

Students begin their exploration of physics by reviewing the International System of Units (SI), scientific notation, and significant digits. They then learn to describe and analyze motion in one and two dimensions. Students learn about gravity and Newton's laws of motion before concluding the course with an examination of circular motion. Students apply mathematical concepts such as graphing and trigonometry in order to solve physics problems. Throughout the course, students apply their understanding of physics by playing roles like science museum curator and elementary teacher. Physics continues the student's exploration of mechanics while also guiding them through some other important topics of physics. Students begin by exploring simple harmonic motion, wave properties, and optics. Students then learn the basics of thermodynamics and fluids. Afterwards, the students explore the principles of electricity and magnetism. Finally, students explore the area of physics known as Modern Physics, which includes topics such as the photoelectric effect, nuclear science, and relativity. This is a trig based course. It is assumed you know and can use trigonometry.

Additional Materials Required:

- None

Student-Teacher Conferences:

Office Hours. Students can schedule up to three (3) Student-Teacher Conference over the duration of the course. These meetings are optional, and attendance will not affect your grade.

To schedule an office hour with your teacher to please visit the Student Resources page on waonline.org.

Washington Academy Grading Scale:

A = 100 - 93

B = 92 - 85

C = 84 - 76

D = 75 - 70

F = 69 or less

Coursework Overview

○ ASSIGNMENTS



Assignments are completed by the student through fillable PDFs which they can fill-out, save to computer, then upload to in the Learning Management System. Assignments are typically found throughout the course(s) and can be opened by clicking the “**Activity**” button when prompted to do so. Assignments will be graded by your teacher.

○ ASSESSMENTS



Assessments, or Quizzes, are predominately computer graded and will test your knowledge of the content of each Section upon completion.

○ EXAMS



At the end of each Unit, Semester and the Course, you will need to complete an Exam.

○ PARTICIPATION



Participation grade is determined upon the completion of the “End of Course Survey.” Participation in Discussion boards or Office hours does NOT affect your grade.