

**ACCELERATED PHYSICS
COURSE SYLLABUS & EXPECTATIONS
2015 – 2016**

Instructor: Mrs. Reardon
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(781) 383-6100 Ext. 154

Location: Room 154

Office Hours: Mondays and Wednesdays after school

Stephen Hawking, one of the world's leading theoretical physicists, once said,

“My goal is simple. It is complete understanding of the universe, why it is as it is and why it exists at all.”

Welcome to physics class! We too will strive for an understanding of how the universe works as we explore the world around us. I have very high expectations of all of you, both academically and personally. Each day when you enter the classroom you must be prepared to think critically and ask questions. Together we can make this a class you will never forget. The majority of the semester will be devoted to an in-depth study of mechanics, and the final topics of the course will be determined based on the interests of the class.

Course Outline

- Unit 1: 1D Motion
- Unit 2: Projectile Motion
- Unit 3: Newton's Laws & Forces
- Unit 4: Work & Energy
- Unit 5: Momentum
- Unit 6: Gravity and Circular Motion
- Unit 7: TBD

Class Materials

Notebook: A three ring binder accommodates the large number of handouts the best.

Calculator: (The one on your phone is not an option)

Textbook: Cutnell & Johnson's Essentials of Physics. Unless I tell you otherwise, it is not necessary to bring your book to class.

Writing Implements: Pens, pencils, and a colored pen or highlighter.

Class Rules

- Put your phone away (and any other electronic devices) at the start of class! Failure to do so will result in detention.
- Come prepared! Forgetting a calculator for a test means that you become the calculator. Take advantage of today's technology.
- Do your own work. Any cheating will result in a zero for all parties involved.
- Do not touch anyone else's belongings or lab equipment unless instructed to do so by the teacher.
- Be nice to each other!

Grading System

Grades will be calculated using total points. A typical unit will be worth 120 points as shown below:

15 pts – HW Packet #1

20 pts – Quiz

20 pts – Formal Lab

15 pts – HW Packet #2

50 pts – Unit Test

Homework

Doing all of your assignments independently is the key to success in this course. Homework will be assigned nightly and reviewed in the next class. On any given day the homework may be checked for completion and effort. Insufficient effort on daily homework assignments will contribute to a lower score on the homework packet when it is graded. Homework packets are due on quiz days and test days. Please take advantage of office hours should you need any additional help on any assignments.

Quizzes and Tests

Quizzes are straightforward assessments that are very similar to questions you have seen in warm ups, labs, and HW problems. Sometimes they will even be identical. They will help make sure that you are up to speed on your assignments, and they will help me to determine what students need additional help on certain topics. Tests are given at the end of each unit and cover all of the material in the unit. If you are absent the day of a test or quiz, it is your responsibility to make it up promptly.

Formal Lab

We will do a number of experiments each unit. The majority of these will consist of gathering data and answering questions on a worksheet. Once per unit we will perform a lab that requires a formal lab write up. Formal labs must be typed and follow the format that we will discuss. In addition to content, they will be evaluated on proper writing mechanics.

“The most incomprehensible thing about the world is that it is comprehensible.” – Albert Einstein

*Class policies may be modified during the school year as needed.
I will inform the class if and when that becomes necessary.*