

**INTRODUCTION TO PHYSICS
COURSE SYLLABUS & EXPECTATIONS
2017**

Instructor: Ms. Reardon
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Location: Rm 154

Office Hours: Announced weekly to coordinate with upcoming assessments.
Please check the classroom door on Fridays for the following week's times.

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 an unforgettable class that provides you with a solid foundation in physics. You'll never think about the world the same way after taking physics!

In order to graduate high school, you must achieve a passing score on a science MCAS test. This course will prepare you for the Physics MCAS Test. This year the test will be administered on two days beginning June 5, 2017. We will study the following topics that will be covered on this exam:

Course Outline

- Unit 1: Linear Motion
- Unit 2: Newton's Laws & Forces
- Unit 3: Energy & Momentum
- Unit 4: Heat
- Unit 5: Electricity & Magnetism
- Unit 6: Wave Properties, Sound, & Light
- Unit 7: Optics (Post MCAS)

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: Physical Science: Concepts in Action (Wysession, Frank, Yancopoulos). 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

- Treat everyone with respect.
- Put your phone away (and any other electronic devices) at the start of class.
- Come prepared! You need a pen or pencil and a calculator every day.
- 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.

Grading System

Grades will be calculated using total points. Units will be worth approximately 150 points as shown below:

- 30 pts – Daily Quiz (~10 quizzes per unit, 3 pts each)
- 15 pts – HW Packet #1
- 20 pts – Unit Quiz
- 20 pts – Formal Lab
- 15 pts – HW Packet #2
- 50 pts – Unit Test

Homework

Practice 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. Homework packets are due on unit quiz days and test days. Correct your homework when we go over it in class and seek help on questions that you don't understand so that when your homework packet is submitted it is your best work.

Daily Quizzes

These are straightforward, brief assessments that address the concepts we are currently studying. 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. (There will be no daily quiz on the day of a unit quiz or test.)

Unit Quiz & Unit Test

The unit quiz is given halfway through the unit and the unit test concludes the unit. Each covers all of the material in the unit to date. If you are absent the day of a test or quiz, it is your responsibility to make it up promptly as well as hand in the homework packet that was due that day.

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 class. In addition to content, they will be evaluated on proper writing mechanics.

Late Work

Late assignments will be accepted but they lose 20% each school day they are late. Assignments turned in more than a week late will not receive any credit.

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