

Physics 2015-2016

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Course Overview:

Physics is the scientific study of the most fundamental laws of nature. This course aims to further develop students' appreciation for and competence in the scientific method. This course also aims to develop students' conceptual and quantitative understanding of physical principles. Students perform experiments to develop proficiency in laboratory technique in applying physical principles to the analysis of experimental data. Units of study in this course vary slightly year-to-year but may include motion, Newton's Laws, collisions, energy, thermodynamics, waves, sound, light, fundamental particles of nature, radioactivity, quantum mechanics, and electricity and magnetism.

The rational and inquiry-driven worldview taught in this course is vastly more important to your intellectual and personal development than any particular course content. When possible, look to the big picture.

Course Outline:

Physics is often described as the study of motion & energy. Sometimes it's described as the study of the fundamental composition and behavior of the universe. Basically, in this class we want to explain and predict what we observe in nature as it relates to the following topics:

Motion	Electricity
Forces	Magnets
Energy	Circuits
Nuclear Physics	Light
Momentum	Sound

Grades:

Scale:

90 -100% = A
80 - 89% = B
70 - 79% = C
60 - 69% = D
0 - 59% = F

Your final grade each semester will be an accumulation of points earned from:

- Daily Check-ins
- Lab write-ups
- Quizzes
- Unit Tests
- Midterm and Final Exams

The aim of this class is for you to master the material. In an effort to achieve this goal, a step-system for grading will be used. In this system, if a student demonstrates mastery of a unit on a higher level assessment, lower scores on a previous assessment will be nullified. Quizzes are level 1, unit tests level 2, and midterm and final exams level 3. As an example, if a student scores a 60% on a quiz for specific topic and then scores an 85% on the unit test showing mastery of the specific topic, the previous quiz grade will be raised to 85%. Assignment and lab scores will not be altered.

Class expectations:

- Be kind and respectful to each other
- Ask questions! You should have questions, please do not be afraid to ask them.
- Use appropriate language in the classroom and in all assignments-this includes your blogs.
- Be honest and hold yourself to the highest level of integrity.
- Work hard in class and finish all homework on time.
- Always think about the material in the context of the “big picture,” do not lose this perspective in the details.
- Do not panic and have fun. Do not let an assessment get in the way of learning and appreciating the material.