

# Applied Physics 1

## Course Description

Applied physics provides an introduction to the basic underlying principles that govern the physical universe and explores these principles through group work, discussion, laboratory experiences, and projects. It is presented on a conceptual level with a limited amount of mathematics. However, the class is designed for students who have some familiarity with the basic rules of algebra. The laws of physics can explain how every component inside your cell phone functions and it is what makes medical imaging, modern communication and the study of stars possible.

**Text:** Conceptual Physics, Paul G Hewitt

## Topics Include:

- Motion and Projectiles
- Forces and the Laws of Motion
- Work and Energy
- Momentum
- Circular Motion and Gravitation
- Fluid Mechanics
- Thermodynamics
- Vibrations and Waves
- Sound
- Light and Reflection
- Electrical Forces and Fields
- Electrical Energy and Current
- Circuits and Circuit Elements
- Magnetism
- Subatomic Physics
- Nuclear Reactions
- Quantum Mechanics
- Relativity

Class Website - <https://sites.google.com/site/daysphysicsclass/>

Email - [mday@efsd.net](mailto:mday@efsd.net)

Phone - 412-896-2349 ext. 7902

Twitter - @MDayEF

**BE SAFE**

Listen to staff and Maintain personal space

**RESPECT OTHERS**

Be on time, Be polite, and Use appropriate language and tone

**ACCOUNTABLE**

Be prepared, Be honest, Do your own work, and Use electronic devices only when permitted

**VICTORIOUS**

Do your best work and Celebrate academic success

**ENTHUSIASTIC**

Have a positive attitude and Take ownership of learning

## ACADEMIC INTEGRITY - SCIENCE

- Try! Listen! Think!
- Use your iPad and phone for educational purposes
- Be prepared for your class
- Follow directions
- Be safe in the lab
- Do not cheat
- Do not get off task or give up
- Do not damage school property

### Grading Procedures

- Grades are based on tests, quizzes, labs, projects, and homework.
  - Assignments will be given and collected daily.
  - Laboratory write-ups will be completed mainly in groups.
  - Quizzes will be given at various times during a chapter.
    - Make-up quiz will be different than the quiz given on the scheduled quiz date.
  - Bonus points will be offered at various times during the year.
- As per school policy:** No assignments will be taken late. Any assignment that is not turned in on the due date will be given an automatic zero.
- As per school policy:** Students will be given one day to make up assignments for every day they are absent. Any assignments not turned in by this make-up date will be given a zero.
- As per school policy:** No credit will be given for assignments that are partially or completely copied from someone else's work.

### Classroom Rules and Procedures

- Be in your seat and ready to work when the bell rings.
- Students will only be allowed to leave class with permission.
- Answer bell ringer questions as soon as you enter class and prepare for class to begin. Bell ringers are timed (4 minutes after bell rings) and reviewed every day.
- Your iPad is all you will be required to bring to class daily.
  - Your iPad is a school issued resource; I expect it to only be used as such during my class.
  - If you choose to use your phone it may only be used for educational purposes as well.
  - All electronics must be placed flat on the table at all times.
- All students will be paired with another student.
  - Your partner is the person sharing your table.
  - You will be expected to help each other understand class material.
  - Groups will be split and students will work individually if both students are not actively working.
  - Students will only be permitted to talk to their partner.
- Students are responsible for all of their own make-up work.
  - The daily list of topics covered and assignments given will be listed on the calendar on the classroom website, on Canvas, and in the weekly email.
- Closers will be given with 3 minutes remaining in each class.

### Actions for breaking classroom rules

- Warning
  - Student conference / Parent email
  - Teacher detention / Parent phone call
  - Office referral – An office referral will be issued for all following offences
- ❖ **I have reviewed and understand all of the information presented on this page.**

**Student: Name** \_\_\_\_\_

**Signature** \_\_\_\_\_

**Email Address:** \_\_\_\_\_

**Parent / Guardian: Name** \_\_\_\_\_

**Signature** \_\_\_\_\_

**Email Address:** \_\_\_\_\_