



Welcome to Physics



Course Expectations

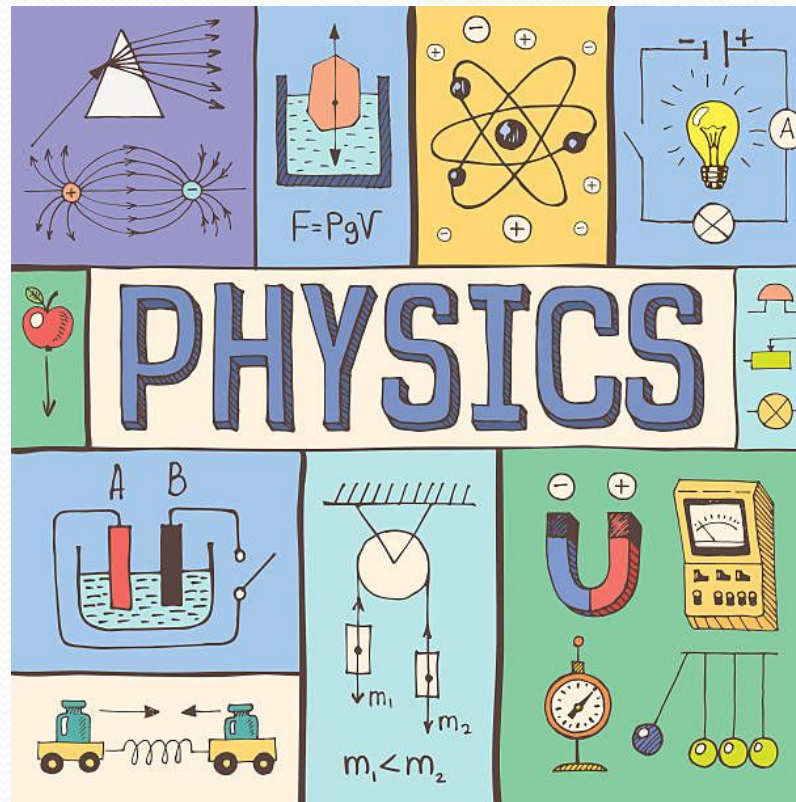
What does it mean to be a scientist?

- Goals:
 - Explore physics concepts through inquiry
 - Think and act like a scientist
- Work as an individual and in groups

Course Expectations

What is needed to be successful in Physics?

1. Resilience
2. Willingness to ask for help
3. Confidence in math (basic algebra)



- Need help with content? Please join Flex offerings when available!



Course Expectations

- Resources, assignments, and weekly agendas posted on Google Classroom

What are we learning?

- Energy
- Electromagnetism
- Mechanical Waves and Sound
- Kinematics
- Momentum
- Forces (Contact and Field)
- Nuclear Processes
- Cosmology

Energy

Current Essential Questions:

How is energy conserved in a closed system?

Student Learning Targets (Level 3):

A Identify types of energy and calculate the value

- $PE_g = mg\Delta h$ Gravitational Potential
- $KE = \frac{1}{2}mv^2$ Kinetic

B Use Conservation of Energy to represent and calculate the transformation of energy in a closed system

- Using equations
- Using Energy Bar Charts

C Describe the link between electric and magnetic energy (electromagnetic induction)

D Evaluate the cost and benefits of energy technologies (See writing rubric.)

E Design, Build and Refine a device to convert one form of energy to another form. (See design challenge rubric.)

Resources

Textbook p197-203

[Kinetic Energy](#)

[Potential Energy](#)

Proficiency Scale:

Topic	Level 2 Learning Target	Level 3 Learning Target
A:	Can identify the general type(s) of energy an object or process has. Can calculate KE and GPE given mass, speed, and/or height.	Can identify all the specific type(s) of energy an object or process has. Can solve for mass, speed, or height from GPE or KE.
B:	Can create a qualitative representation of the total energy in a system before and after a transformation using an LOL diagram.	Can create a quantitative representation using graphs and/or equations of the total energy in a system before and after a transformation
C:	Identify a situation where electric potential energy transfers to magnetic potential energy or vice versa	Use an LOL diagram to account for changes in energy during electromagnetic induction

Grading

60% Summative (quizzes, tests, formal labs)

20% Formative (homework, classwork, informal labs)

20% Final Exam

Retakes: Each learning target can be retaken individually

Students must see me at flextime and do additional practice to be eligible.

Grading

GRADING SCALE

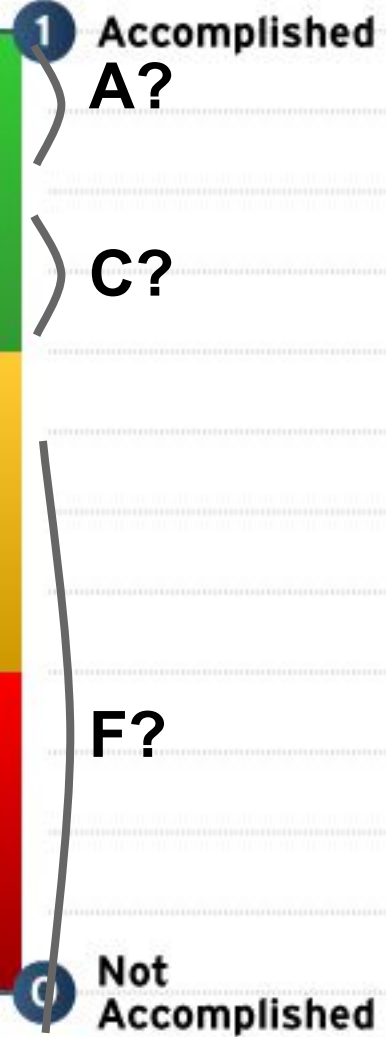
A (90 - 100%)

B (80 - 89%)

C (70 - 79%)

D (60 - 69%)

F (0 - 59%)



4-Pt. Scale:

Used for ALL assignments and tests!

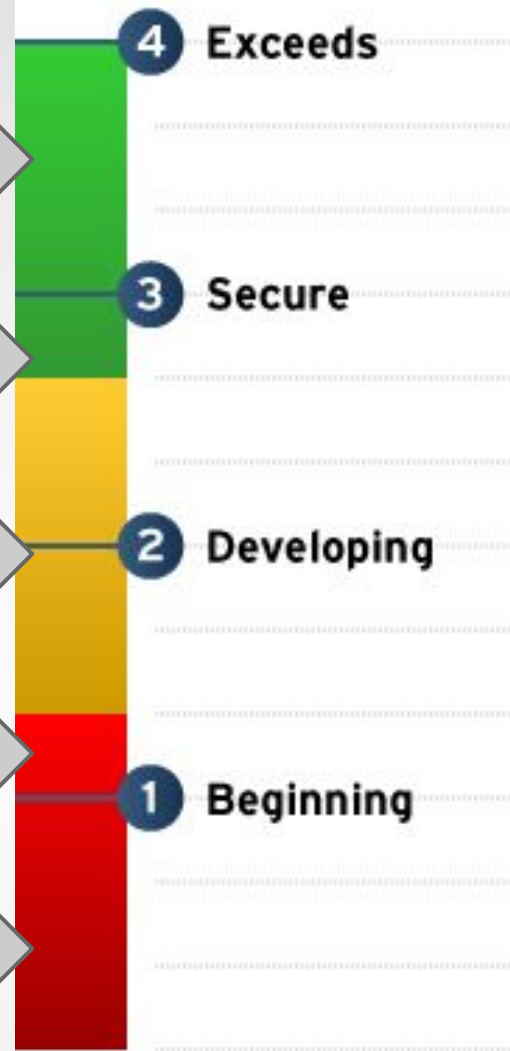
Met all expectations = A

Didn't reach all goals = B

Only got the basics = C

Didn't get the basics = D

Didn't try or absent = F



How does it look in PowerSchool?

Letter Grade shown in PowerSchool	A	B	C	D	F
Average point value of all assignments	3+	2.5	2	1	0
Percentage you will see in PowerSchool.	75%+	62.5 - 74%	50 - 62%	25 - 49%	0 - 25%

Communication

- **Encourage your students to communicate with me.**
- If they are uncomfortable bringing something up in class, ask them to talk to me outside of class. (email, google classroom, remind)
- 90+% of the problems I encounter as a teacher can usually be avoided with effective communication.
 - If they are getting behind: have them talk to me BEFORE it's too late.
 - If they are getting overwhelmed, have them talk to me.
 - If they know they are going to be out or not able to meet a deadline, have them talk to me BEFORE-hand and I will work something out with them.
- **THANK YOU!!**