

# Principles of Physics

## Introduction

# Topics & Activities

- The primary focus of this course is to help each student understand how force, work, rate, resistance, energy, and power relate to the mechanical, electrical, fluid, and thermal systems of physics. The course is lab intensive, with a strong hands-on approach. It has an emphasis on group collaboration and competition.

# About the class

Follows a common pattern.

Mostly done in small groups

1. - Chapter preview – demo &  
10 questions from book  
- End of class / Next class, go over and discuss
2. - Movie & Vocabulary activity
3. - Hands on practice of topic or skeletal notes
4. - Work sheet(s) on topic
5. - Topic related project or lab
6. - Several types of assessment

# Text Book

Will utilize a “classroom set” of text books

- Conceptual Physics
  - With accompanied worksheets
  - On-line Activities
- You will be assigned a laptop for this room.
  - <http://2ndfave.wikispaces.com>
    - click on POP page
  - PhET ([Physics Education Technology](#))
    - With accompanied worksheets



# Teaching Style

- I promise never to lecture to you all period.
  - “You give me my time, I’ll give you yours.”
- My goal is to prove to you that what you learn in this class will be useful to you.
  - Help you understand the world better
- I try to keep this class light hearted and good natured.
  - Don’t mistake my good nature for being a push-over. I do bite.

# Grading

- - Online grade book
- - I take attendance every day
- - If given an assignment to do in class,  
I expect you to do it that day. (Hand it to the tray)
- - If you choose not to do it that day, you'll get a zero.
  - 2 zeros in grade book = MAS
- - If absent, you'll get an “m” and have to complete it by  
an agreed upon date (periodic make up days)
- - 20% Class work
- - 30 % Labs and activities
- - 40 % Tests and Projects
- - 10% Class participation

# MAS - Mandatory Academic Support

- After school assistance for students who need help or need to make up an assignment. (2:45 to 4:00)
- You will be sent to MAS for:
  - 2 zeros in gradebook.
  - to make up a test, paper, lab report, or other major project.
- If assigned to MAS, you must go to complete the assignment, and you will receive a 10% reduction in the grade.
- MAS comes before any other extracurricular activity (sports, band, chorus, even D-hall)



# Top 5 ways to lose points

- 5. No name or Period on a paper. (-1)
- 4. Not following directions (-1 or more)
- 3. Not showing proper units. (-1)
- 2. Not showing your work. (+0)
  - ~~—“I used my calculator”~~
- 1. If I can't read it, I wont grade it. (+0)



# Behavior

- Be on time – I lock my door at the late bell
- - Unexcused late = detention  
(the office will give you a late pass)
  - Watch your language  
2 strike rule
  - Foul outbursts:  
1 days D-hall for all involved
  - Cheating – see page 10 of hand book
  - RESPECT
- 

**If the bell has  
rung and you  
don't have a  
pass,**

**DON'T  
KNOCK!**

# Snack food in Class is OK!

(Senior Privilege)

- Outlawed Food
  - Any Projectiles (M&M's, Skittles, etc.)
  - High caffeine energy drinks
- This is a privilege that I may temporarily suspend or take away.
  - If I have to clean up after you
  - If you spill and leave a sticky mess
  - If it causes a problem in class

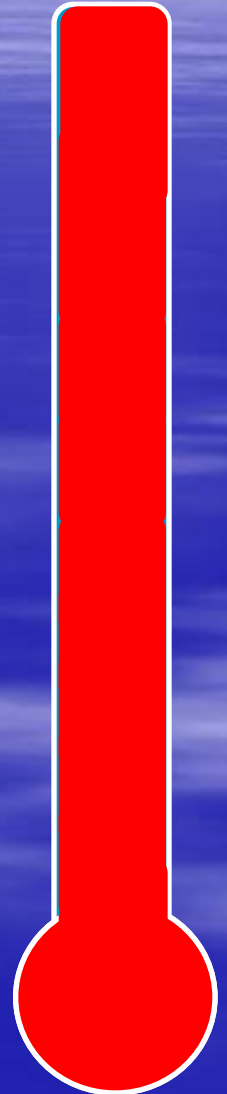
# Room Tour

- Ceiling
- Posted Grades
- Sharpener
- Word Wall
- Essential Questions
- Equation circle
- Out Box & POP Storage
- Drawers
- In Tray
- Lab area
- Assignment Board
- My Porch



# 10 Things that will Tick-me-off!

- 10. Missing or broken lab equipment.
- 9. Hanging out in front of my room.
- 8. Annoying Potty habits
- 7. Table top graffiti.
- 6. I'm Mr. Rita, not *Rita*, not *Hey*, not *Yo!*"
- 5. Hats, Shades or Underwear.
- 4. Blank spots on tests. (IDK)
- 3. Standing on my porch.
- 2. Substitutes are not play things.
- 1. Sitting on my desks and tables.



# We only have another 179 days together....

- You give me my time – I'll give you yours
- Sanitation Engineer Rule - You do your daily job WELL, and you are done for the day.
- The activities we do are pretty fun. Physics is not a spectator sport. Be a part of them!
- Don't put me in a position where I need to enforce the rules.
- I pledge you my respect, I hope you will show me that same level of respect.

Let's take a test.