

PHYSICS SYLLABUS

Instructor: Mahua Chakraborty
2014-2015

Goals: Through out the course emphasis will be placed on problem solving and skills on laboratory work.

To provide sufficient instruction so that students continue studying physics at college level.

To understand and clarify the basic concept in Physics.

Text: *PHYSICS*, Holt

Content: The main topics we plan to cover include:

1st nine weeks:

- Velocity, displacement and acceleration
- Vectors, projectile motion and relative motion.
- Newton's laws

2nd nine weeks:

- Work and Energy
- Momentum and Collision
- Circular motion.

3rd nine weeks:

- Fluid Mechanics
- Heat
- Thermodynamics

4th nine weeks:

- Waves
- Sound
- Light and Refraction

Class Prerequisite: Students should complete Algebra II. If you have not met this requirement then please talk to me personally.

Materials: Please bring the following to class daily:

- Blue/Black pen, #2 pencil, and a ruler
- Scientific calculator
- A composition notebook for taking notes.
- Textbooks
- Composition lab notebook when indicated.

Class Behavior: KEY word is RESPECT

- Students are expected to speak with respect to and with the teacher and their fellow students.
- **No eating, drinking, or chewing gum in the class. Before entering the class, make sure you trash your drink or spit out your gum. Only a bottle of water is allowed in the class as well as the lab.**
- **Students are expected NOT to bring any games, throw things, tamper with the equipments etc. in the classroom or the lab.**
- Students are expected to sit in their assigned seats and PAY FULL ATTENTION in the class.
- **The students are expected to bring all materials needed for the class.**

Homework: Homework will be assigned daily since science requires repetition in order to master concepts and develop necessary problem solving skills.

- It should not take you more than 30-40 minutes.
- HW will be checked before class starts.
- For problems make sure you show the calculations.
- HW **should not** be done in red ink.
- Late HW is not accepted.

Grading: Students will be graded on quizzes, exams, homework, and lab work.

- **Grade distribution will be up on my webpage.**

Remember that PHYSICS IS “PHUN!!” I look forward to an excellent year!!!