KENNEDY HIGH SCHOOL
COURSE SYLLABUS 2016-17

PHYSICS COURSE DESCRIPTION
Physics is a year-long course, which examines motion, forces, energy, matter, heat, sound, and light. The physics field ranges from the far reaches of the universe to the insides of atoms. This course covers not only the body of knowledge that we call physics but also stresses the history of and the ongoing research into the adventure we call science. The course emphasizes laboratory work and exploration by students, recognizing that we cannot present the entire body of scientific knowledge because there is too much to teach. We can hope for best results if we clearly present how science works and the processes and methods which expand scientific knowledge.

GENERAL INFORMATION
Course: Physics
Name of instructor: Wendy Chen
Room number: B-24
E-mail address: wendy-chen@scusd.edu
Phone number: 916-395-5090 x:506124
Website: www.jfkphysics.com
PREREQUISITES: C or better in Math 2
CO-REQUISITES: Math 3 or higher

TEXTBOOKS
Publisher: McGraw-Hill/Glencoe (2004)
Language: English
ISBN-10: 0078458137
ISBN-13: 978-0078458132

MATERIALS NEEDED
binder, scientific calculator, pencil, eraser, paper, and notebooks are required daily.

COURSE OBJECTIVES
1. Understand what physics is and how it coordinates with other sciences.
2. Be aware of the history and evolution of scientific thoughts from Aristotle through contemporary physicists and theory.
3. Understand the scientific method, experimentation and be able to distinguish between hypothesis and theory. Students should be able
   a. to use some of the tools of physics for measurement and experimentation, and
   b. to devise experimentation to test a hypothesis.
4. Be able to apply concepts of science and physics to ordinary phenomena encountered in life.

EXTRA HELP
Office hours are during lunch or after school. If you plan on stopping by after school for help, please be prompt or let me know ahead of time if you will be late.

ABSENCES
It is your responsibility to check www.jfkphysics.com or with the teacher **before or after school** for work missed. You have the number of days you are absent plus one day to make up the missing assignment. For example, if you are sick for two days, you have two days plus one day (three total) from the day you return to complete the missing work. If you have missed a lab, you must arrange a time with me to make up the lab as soon as you return, if you do not do this in a timely manner you will not be allowed to complete the lab and will be given a zero. Unfortunately, demos cannot be made up. Consult a peer if you missed out on an in-class demonstration.

Note: Items on this syllabus may change throughout the year. Students will be informed if changes occur.

LATE WORK
Unless you have an **excused** absence, late work will not be accepted. Assignments are due at the time of collection. No exceptions. All assignments are posted on the class website.

RESTROOM POLICY
Class time is precious, so please try to use the restroom during passing time. No restroom passes will be given the first 10 minutes, last five minutes of class, or during lecture. All students must use the bathroom pass when exiting the room.

TARDIES
You are considered tardy if you are not sitting in your seat when the bell rings.

ACADEMIC DISHONESTY
Allowing someone to copy your answers or copying someone else's answers is a serious offense that will result in a zero for the assignment. Talking during a test or quiz is prohibited and may also result in a zero.

HOMEWORK POLICY
Homework will be assigned in this course. Check the class website for upcoming due dates.

GRADING POLICY

Categories	Weighted (%)	Grading Scale (%)	Letter Grade
Assignments & Homework	10	[90, 100]	A
Labs	20	[80, 90)	B
Quizzes/Exams	50	[70, 80)	C
Final Exam	10	[60, 70)	D
Participation & Warm Ups	10	[0, 60)	F

Your grade in the class is determined by YOU. Teachers do not "give" grades, we simply tally up the points.

UNITS COVERED	TIME
Unit I: Motions and Forces	9 weeks
Unit II: Conservation of Energy and Momentum	8 weeks
Unit III: Heat and Thermodynamics	3 weeks
Unit IV: Waves and Optics	6 weeks
Unit V: Electric and Magnetic Phenomena	7 weeks

(Investigation and Experimentation Standards are incorporated in Units I through V)

COURSE ACTIVITIES AND ASSESSMENTS
The physics course covers physics concepts, applications of mathematics to scientific principles and laboratory work. Assessment needs to evaluate student progress in all these areas. Methods of assessment should include:

1. Pre-laboratory and laboratory write-ups.
2. Performance assessment in the laboratory
   - (informally) observing student activities during laboratory investigations.
   - (formally) assessing with practical exams on specific laboratory procedures.
3. Unit tests and quizzes that include essay and short answer questions on concepts as well as mathematical applications.
4. Class participation.
5. Projects that demonstrate the use of physics principles in practical applications.
6. Portfolios that contain a diverse sampling of the student's best work for the year.

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LABORATORY RULES

For safety purposes, all lab equipment should be used according to directions. Inappropriate use of lab equipment is a serious offense and may result with a zero on the assignment, parental contact, and/or disciplinary action. Further misuse of equipment will result in a written referral.

CLASSROOM RULES

- Comply with all school rules.
- Come to class prepared and ready to learn!
- Respect others and their ideas.
- Be seated quietly when the bell rings.
- Respect classroom equipment.
- Put away and silent personal electronic devices.
- No personal grooming.
- In addition to classroom policies, students are expected to abide by school and district policies.

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