Name _____ ***Date*** _____ ***Period*** _____

Ruiz-Houston's HONORS PHYSICS Course Guide

Class Philosophy & Rules

Fundamentally, Physics is the study of how things work...very big things and very little things. It is also where we apply mathematics. It is not really possible to study physics without an extensive use of mathematics. Physics is also the use and development of critical thinking skills. Critical thinking skills are in great demand and are those that are higher level and "out of the box" in nature. I will be expecting this kind of mature thinking in everything we do this year.

Each of us has some goal for our year in Physics. Your goal may be related to grades or maybe to college or career. Regardless, your goals are important to me and I want to see you attain them. My goals for this year are to strengthen your technical/science skills. I want you to be able to take on the challenge of the very technical world that you are going to inherit with a focus on STEM. STEM is an acronym that stands for Science, Technology, Engineering, and Math. I also want you to become very strong thinkers and problem solvers. Hence, I only have three fundamental rules for my classroom:

RESPECT ~ for yourself, others, and the materials that have been provided for us.
RESPONSIBILITY ~ for you own actions and lack of actions.
HONOR ~ Honesty about what effort you have put forth and in dealing with others.

Class Responsibilities & Procedures

OK…Now some housekeeping issues…..

- ***Classroom environment*** ~ the classroom rules are on the front wall. They are simple and are good rules of citizenship. We will observe all of the school "Disciplinary Policies and Procedures". I am expecting mature behavior from everyone in the classroom. Boys should be gentlemen and girls should be ladies, each showing respect toward the other. Bad or inappropriate language is not going to be accepted at any time from anyone.

- ***Daily Procedure*** ~
  - Follow all county/school rules – as per Student Code of Conduct.
  - When you enter the classroom:
    - Be in your seat at the bell
    - Put away your backpacks (either under your desk on the floor or on the side of the room)
    - Be prepared to work:
      - Each day, please take out your composition books and start a fresh page. Put the date on the page and leave a space for the daily stamp. Copy the 'Do Now/ Focus Question' and try to answer it.
      - During this time I will take attendance, stamp your homework and stamp your 'Do Now/ Focus Question'.
  - Be respectful of teacher and other students
  - No talking while others are talking.
  - No sleeping and no passing notes.
  - Cell phones, iPods, and all other electronic devices should be "on vacation" and in backpacks at all times unless I've given express permission to use them.

- ***Attendance*** ~ please be here in class every day or you will fall behind from the first day. Attendance is the first rule of success in most things in life. Please be in your assigned seat when the bell rings.

  It is your responsibility to find out what assignments you have missed and makeup the work if you are absent for any reason, INCLUDING field trips and sporting events. Do NOT delay! You can find a pacing guide for the entire quarter and a syllabus for each chapter on my website (https://educatorpages.com/site/MrsRuizHouston). Extra photocopies are kept in the bin on top of the bookshelf. Please get notes from a fellow classmate or use the notes that I have also place on my website.

- ***Absences*** ~
  - If a student has an EXCUSED absence, he/she is responsible for any work missed. The student will be given 2 days to complete make-up assignments. It is the student's responsibility to pick up his/her make-up work and turn it in within the 2 days. (Per the Code of Conduct).

  - PLEASE NOTE: All **tests** will be announced in advance, if a student has an EXCUSED absence the day of a test, he/she will still be responsible for taking the test the day he/she comes back. (Per the Code of Conduct). Make-up tests will cover the same material, however makeup tests will be entirely fill in.

- ***Passes*** **~** Students are expected to use the restroom between classes & lunches. Passes will be issued ONLY during the first &/or last 5 minutes of class. During class, only emergency passes will be issued.

- ***Dismissal*** ~ Students are dismissed by the teacher, not by the bell. If you are working diligently you will find that you can begin your homework in class.

- ***Homework*** ~ please do it all because it prepares you for the next day. Some test questions come from homework questions. Doing homework is good practice for what you will see in college and in the professional workplace. Each homework packet is a part of the final review. Homework will be reviewed daily and will be randomly collected for a grade (usually on Fridays).

- ***Supplies*** ~ you will need to bring your supplies to class every day. Failure to bring your supplies will make it particularly difficult to compete you work for the day. You have been given a paper copy of the supplies needed for this class; an additional copy of the list is located on my website.

- ***Calculators*** ~ you will need to have a scientific calculator of some type so that you will be able to do and check your homework. We DO NOT have a set of classroom calculators. You will be responsible to make sure that your calculator is available for each class.

- ***No food in the classroom***.

- ***Backpacks*** ~ Backpacks need to be under your desk during class. Please don't try to hide your cell phones in your lap or behind your backpack.

- ***Assignments*** ~ Assignments that are not turned in will receive a zero.

- ***Classroom cleanup*** ~ you will need to leave the area around your desk or lab table clean, picked up, and ready for the next class.

- ***Cheating*** ~ cheating does no good for anyone involved & will receive a zero. Do not jeopardize your reputation by cheating. Cheating certainly does not prepare you for a productive professional or personal life. Do your own work. If you got help on homework, say so. Someday you may want or need a letter of recommendation. I will not write a letter of recommendation for anyone who has cheated.

- ***Problem solving*** ~ Problem solving in Physics is easy if it is done in a systematic way. Generally each of your solved problems should include the following parts: Given, Unknown, Equation, Solution, Answer and Check (i.e. GUESS) More will be said about problem solving in class.

- ***Tutoring*** ~ come to tutoring prepared. It is hard to help you when you have not tried the material yourself or if you have not read the text. I am available for tutoring before school during my office hours on Thursday &/or Friday at 7:00 am.

- ***Reading*** ~ you will be expected to read your textbook and scientific articles throughout this course. Tests will assume that you have read the material in the textbook and that you can process scientific material. Reading is critical to success in life and takes practice. Therefore, we will work to improve your skill base.

- ***Interactive Notebook*** ~ I will be giving you materials that you will need to keep for the year. Everything will be in a format so that you can glue it into your interactive notebook. I will expect you to keep a neat notebook.

- ***No Opt Out*** ~ when I call on you for an answer in class, you must answer. IDK is not an acceptable answer. I am going to keep informal notes on your classroom participation.

- ***Fire and Emergency Drills*** ~ strict attention to the teacher's instructions is required during all drills. Every drill will be treated as if it were for real.

- ***Grading*** ~ each assignment will fall under a major Category. It is important to note that this means that not all assignments will carry the same impact on a student's overall grade. When using Pinnacle at home to view grades, the overall grade that you see will not be a simple average of all the grades listed.

Tests

- Tests are assigned ahead of time. Often tests will cover one long chapter or a combination of shorter chapters. There are multiple choice / gridded response and free response questions on every test.

- The **Multiple Choice / Gridded Response Portion** of the Test will count for 50% of the test grade. Usually there are 20-30 questions per test. Partial credit is not given.

- The **Free Response Portion** of a Test will count for 50% of the test grade. Usually there are 5-8 free response questions per test and partial credit is given on the free response questions. The four points are distributed as follows:
  - 1 point ~ Givens & Unknown
  - 1 point ~ Correct Equation & Mathematical Calculation
  - 1 point ~ Correct Answer
  - 1 point ~ Correct Unit

- **BONUS** ~ Test Review Assignment ~

  - The "test review assignment" is NOT a requirement but it is a bonus assignment that is due on the test day of each unit. The students can earn up to 5% bonus in the test category for each of these assignments. (i.e. a student could theoretically receive a 105% on a test if they completed the test review assignment).

  - The "test review assignment" is to be completed in the student's composition notebook (NOT on loose leaf paper). The assignment consists of three sections:

    1. Vocabulary & Definitions ~ The student needs to copy all of the vocabulary for the chapter(s) and define each of the terms.

    2. Equations ~ The student needs to copy all of the equations from the chapter(s). These are usually found in blue or brown boxes within the chapter(s).

    3. Sample Problems ~ The student needs to copy all of the sample problems from the chapter(s). This INCLUDES:
       - the question
       - the text explanation of how to do the problem
       - the work to solve the problem
       - the calculator solution
       - tips, figures/ diagrams, etc.

- ***Comprehensive Exams*** will be given at the end of quarter 1 and quarter 3. A Midterm is given after quarter 2, and a Final during quarter 4).

- ***Labs and Projects***

  - Students work in small groups to perform the LAB in class and analyze the data in order to complete the lab write-up. One lab is due per group. The lab report must follow the rubric given in class. Students will not be allowed to print the lab in class.

    - Mini-labs are worth ½ of a full lab. Students will observe a teacher-led demonstration, then analyze and write-up the results. Each student will complete a mini-lab report.

    - Quarter Project ~ Students, working in small groups, will be assigned a topic for a long term project (approximately 4 weeks) that will culminate with a paper and a presentation/demonstration in class.

- ***Homework/ Classwork/ Discussions/ Participation***

  - Homework will be given almost **every night**. Classwork may include pop quizzes, at the teacher's discretion.
  - In an effort to improve our students' skills, my students will be responsible for working with the materials in the 'Physics Toolbox' on a weekly basis. The 'Physics Toolbox' will count in the homework category and will consist of reading scientific articles and answering questions, completing graphing practice exercises and scientific vocabulary building exercises. In our classes all of these materials will be about Physics topics and will be related to content that corresponds with our curriculum.

- ***Quizzes***
  - These are assigned ahead of time. The formal quizzes will cover short chapters or parts of longer chapters.
  - BONUS ~ County Mini-Assessments ~ This assignment is NOT required but acts as bonus to your score. The Mini-Assessments are short, targeted quizzes developed around individual Next Generation Sunshine State Standard Benchmarks or clusters of similar benchmarks. They are designed to be used following instruction on the benchmarks to determine the level of mastery. These assessments will be continually monitored for improvement.

    There are a total of six County Mini-Assessments for the course of the year. Three will be given during the first semester and three will be given during the second semester. There are 15 questions on each of the County Minis and each question that you get correct will count as a bonus point in the "Formal Quiz" category of your grades.

The topics for our course is very traditional and mostly follow the order of our textbook. The sequence is outlined below but is subject to change:

First Quarter	***Second Quarter***	***Third Quarter***	***Fourth Quarter***
The Science of Physics	Work & Energy	Heat & Thermodynamics	Electric Force
1D Kinematics, 2D Kinematics & Vectors	Momentum & Collision	Wave Properties	Electric Energy & Ohm's Law
Force & Motion	Circular Motion & Gravitation	Light & Sound	Magnetic Field & Electromagnetic Indication
		Refraction	Atomic Structure & Quantization of Energy
			Einstein's Special Theory of Relativity

Emergency Contact Information

Student Name _____

Mother's/Guardian's Name _____

Home Number _____ Work Number _____

Email _____

Father's/Guardian's Name _____

Home Number _____ Work Number _____

Email _____

Signatures

I have read and will abide by these rules and guidelines while in Honors Physics class.

_____ _____

(Student Signature) (Date)

I have read and understand what is expected of my child in Honors Physics class. The contact information above is accurate.

_____ _____

(Parent Signature) (Date)