

Physics Honors Syllabus

Teacher: Mr. Yeager

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Location: Glen Rose High School room 113

254-898-3840

Course Description

This course is recommended for students in Grades 11 or 12 who exhibit a highly motivated attitude toward learning and a successful aptitude towards their scientific endeavors. Students study a variety of topics that include the laws of motion, forces, conservation of energy and momentum, thermodynamics, electricity, characteristics and behavior of waves, and atomic, nuclear, and quantum physics.

Prerequisites: Completion of Chemistry and completion or concurrent enrollment in Algebra 2.

Tutorials

Monday – Friday 7:25 AM

Classroom Rules

- I. Be respectful to others.
- II. Bring materials to class every day.
- III. Stay seated.
- IV. No food, drinks, or gum in class. Bottled water is encouraged and accepted at desk only.
- V. No cell phone use during class.
- VI. All rules in accordance with the student handbook will also be followed and enforced.

Class Materials

1. Pen/pencil
2. Notebook
3. Calculator
4. School-issued computer

Grading Policy

60% Tests

20% Labs and Projects

20% Daily Work

*** ANY work turned in without a name will receive a 10-point deduction.

*** Work turned in late will receive a 30-point deduction. NO work will be accepted one week after the initial due date.

Course Topics

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|-------------------------------------|-----------------------------|
| I. Algebra- and Unit-based Learning | II. Kinematic 1D Motion |
| III. Kinematic 2D Motion | IV. Newton's Laws of Motion |
| V. Work & Energy | VI. Momentum |
| VII. Circular Motion | VIII. Universal Gravitation |
| IX. Rotational Dynamics | X. Thermodynamics |
| XI. Electrostatics | XII. Electricity |
| XIII. Magnetism & Electromagnetism | XIV. Properties of Waves |

XV. Behaviors of Waves
XVII. Atomic & Nuclear Physics

XVI. Sound & Light
XVI. Special Relativity

Make Up Work

- I. Tests: Students who miss school during a testing day will take the test in class (or during tutorial time if they choose) the next day they return to school.
- II. Labs: Students who miss school during a laboratory activity will be given one week to make up this lab during tutorial time.
- III. Daily Work:
 - a. Students missing school for pre-scheduled events (such as extracurricular events or field trips) will be expected to still get any daily work completed on time.
 - b. Students missing school for non-scheduled reasons (illnesses, family emergencies, etc.) will be given time equal to the number of days absent to make up any daily work missed.

Retesting

Retesting is permitted only under the following conditions:

- a) Student received a failing grade on a unit test on the first attempt. There will be no retesting to bring up a passing grade.
- b) All assignments that relate to the test must have been completed and turned in on time.
- c) Student must attend a tutoring session outside of class to go over missed questions on the original test.
- d) Retest must be scheduled and completed within one week from the original test day.
- e) The retest will not be the same unit test taken the first time around.
- f) The highest possible replacement grade on a retest is 70. A grade of 70 is not, however, guaranteed. The student will receive a 70 only if at least 70% of the retest is correct.

Consequences for Cheating / Plagiarism

Students found to be cheating or plagiarizing work will receive a zero on that assignment and an office referral.

Cell Phone Procedures

Students will place cell phones in designated area during class. Headphones/earbuds or smart watches will not be worn in class. Any device found in class will be given one warning to put away. Any device found in class a second time will be turned in to the office.

Procedures for Emergency Shutdown

In case of an emergency shutdown, Canvas will be utilized for all classroom instructions. Students will be expected to check in daily for instructions.