

Physics I Syllabus 2023-2024

Instructor: Angie L. Culberson-Espinosa Room: 402

Phone: 580-5300 ext. 1345 Conference Period: 1st Block

Email: Tutoring: Tues & Thur 4:15-4:45 PM

Course Description: This is a 1st year general physics course and will include the topics of kinematics, force & motion, energy, momentum, heat, thermodynamics, light, sound, electricity, magnetism, electromagnetism, and modern physics concepts.

Course Information: The course is an algebra-based physics and use of math is required. The student must have pencils or pens, a scientific calculator, (a TI-30 is more than adequate), and a notebook. Occasionally, the teacher will provide all lab elements; therefore, not all labs will be formally written up.

Course Outline: Instructional days will include checking/reviewing assignments, quizzes, writing assignments, lecture/explanation, lab activities and individual practice/questions/feedback/projects.

Resources: All resources will come from PLTW Principle of Engineering coursework and modules. Additionally, extra projects may be added as needed.

Instructional Procedures and Support: The teacher will be available for tutoring after school. It is the student's responsibility to ask for help when needed and for making the required transportation arrangements. Retesting will be available in accordance with SISD High School Grading Policies.

Classroom Management Procedures: District Policy Will Be Enforced.

Classroom Expectations:

As per district policy, major exams/assignments/lab write-ups will account for 60% of the student's grade. Lab questions, quizzes, and home/class work will account for the remaining 40%. All students will be given 2 additional days to make up a major assignment if late (with a progressive grade penalty of 15 points per day).

Statement for Academic Dishonesty

Academic integrity is fundamental to the activities and principles of our school. No student shall cheat or copy the work of another. Plagiarism, the use of another person's original ideas or writing as one's own without giving credit to the true author, will be considered cheating, and the student will be subject to academic discipline that may include loss of credit for the work in question.

Course Schedule:

Principles of Engineering Unit Summary

Unit 1: Product Design and Development

Unit 2: Designing Infrastructure and Developing Sustainability

Semester Exams

Unit 3: Mechanical Design

Unit 4: Application of Robotics

Final Exams