

Richmond County Technical Career Magnet School
Physics Syllabus

Physics Instructor: Dr. Sharon Doe

Course Description

Physics is a yearlong course. The topics studied include motion, conservation of momentum, thermodynamics, electricity, and magnetism. The course engages students with problem solving using real-world situations so that students make a connection between physics concepts and their everyday world. The course is divided into five units: *linear motion/kinematics, forces, conservation of energy, electricity and magnetism, and waves.*

Instructional Philosophy

I believe that active learning and engagement of students is a priority. Students will be expected to fully participate in every activity, whether working in groups or working independently. To accommodate the different learning styles, students should expect a variety of instructional methods. These will include virtual lab experiences, projects, presentations, written assignments, class discussions, videos, and lectures. Multiple types of assessment will be employed to measure student progress toward mastery of the standards. These will include, but will not be limited to observations, student participation in class discussions, projects, presentations, written tests, oral questions, and student conferences.

Standards for the course

Students are expected to obtain, evaluate, and communicate information about

SP1. the relationship between distance, displacement, speed, velocity, and acceleration as functions of time

SP2. how forces affect the motion of objects

SP3. the importance of conservation laws for mechanical energy and linear momentum in predicting the behavior of physical systems

SP4. the properties and applications of waves

SP5. electrical and magnetic force interactions

SP6. nuclear changes of matter and related technological applications

Grading policy

A course grade will be given according to the following weights:

Homework and Class work 20%, Quizzes 30%, and Tests 50%

Expectations

All students are expected to

1. Show the kind of respect you wish to receive
2. Be fully focused on the lesson
3. Use business language
4. Dress appropriately for the setting
5. Follow the teacher's directions the first time they are given
6. Come to class on time and have all necessary materials
7. Complete all assignments and turn them in on or before the due date and time

Conferences/Contact

Parent-teacher conferences can be made by calling the RCTCM guidance office. My email address is doesh@boe.richmond.k12.ga.us.

Other Important Information

All assignments must be in your own handwriting (unless you are told otherwise by the teacher). All handwriting must be legible, dark enough, and large enough for the teacher to read easily. All assignments are expected to be completed. All assignments must be turned in by their due date and time. All homework must be turned in within the first 5 minutes of the class period (unless you are told otherwise by the teacher). Tutoring is on Fridays from 3:30 pm to 4:00 pm.