

JEFFERSON TOWNSHIP HIGH SCHOOL

COURSE OUTLINE AND REQUIREMENTS

COURSE: PHYSICS HONORS

DEPARTMENT: SCIENCE

DESCRIPTION: This course is intended for highly motivated students who wish to pursue further science courses in college. Physics deals with the properties, changes, and interactions of matter and energy. This course is designed to strengthen one's understanding of key physics concepts and encourage scientific thinking by engaging students. . Topics include one and two dimensional motion, forces, energy, momentum, thermodynamics, electromagnetism, electrostatics, light, vibrations, and waves. Learning to think critically is stressed through the use of core content, lab work, demonstrations and projects that span the marking period.

CONTENT: An outline of major topics covered in class is listed below:

Laboratory Practices	Momentum and Collisions
Mathematics in Physics	Molecular Motion and Energy
Motion in a Straight Line	Electrostatics
Vectors and Two Dimensional Motion	Electromagnetism
Newton's Laws of Motion	Light
Work and Energy	Vibrations and Waves

RELATED REQUIREMENTS: Each student will be required to:

- Be on time for class
- Bring textbook, notebook, calculator, and pen/pencil each day to class
- Complete homework assignments and hand them in on time
- Participate in classroom discussions
- Do laboratory work and submit lab reports on time
- Complete special projects
- Complete on-line homework and assessments through WebAssign®
- Follow all lab safety rules at all times
- Make up all work missed due to absence promptly upon returning to school

EXTRA HELP AND MAKE-UP: Extra help and make-ups will be available on days to be announced, or by appointment with the instructor.

EVALUATION: Marking period and final averages will be determined by using the grading scale outlined in the current edition of the Student Handbook. Numerical grades will be assigned based on the quality of the student's work on homework assignments, laboratory reports, quizzes, tests, midterm and final examinations, supplementary assignments and the quality and extent of the student's participation in class.

E-mail: jguziewicz@jefftp.org

Website: <http://blogs.jefftp.org/wordpress/jguziewicz/>