

ROSLYN HIGH SCHOOL

DEPARTMENT: SCIENCE

NAME OF COURSE: ADVANCED PLACEMENT PHYSICS 1

GENERAL DESCRIPTION OF COURSE

This is a first-year college physics course for advanced students having an aptitude for science and math. Student explore various topics based on six Big Ideas, which encompass core scientific principles, theories and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. Emphasis is placed upon developing problem-solving skills. Facility in algebra and geometry is necessary. The curriculum is designed to prepare students for the AP Physics exam.

MAJOR TOPICS COVERED

- ❖ Newtonian mechanics(including rotational motion)
- ❖ Work
- ❖ Energy
- ❖ Power
- ❖ Mechanical Waves and Sound
- ❖ Simple Circuits

TEXTBOOKS

Physics, Giancoli, 5th Edition Prentice Hall

REQUIREMENTS

To be successful in this college-level course, students must be responsible, dedicated, and self-motivated. Study skills are emphasized early in the course and are reinforced throughout the year. Regularly assigned homework will be demanding and time consuming. The course culminates with the AP Physics examination.

GRADING PROCEDURES

Grades are determined predominantly by unit tests. Laboratory reports, participation, and written assignments contribute to the overall grade. The final grade is computed as the average of the four quarters' grades. College credit may be available through Adelphi University as well (Fees apply).