

ST. CHARLES NORTH HIGH SCHOOL
COURSE SYLLABUS

COURSE: **AP Physics 1**

COURSE DESCRIPTION:

This algebra-based course covers content found in a typical first semester college physics course: Newtonian mechanics (including rotational dynamics and angular momentum), work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. There will be emphasis on problem solving, critical thinking and hands-on experimentation. All students will take the AP Physics 1 exam in the spring.

PREREQUISITES: 2 years of lab science and Algebra II

UNITS OF STUDY:

- Kinematics**
- Newton's Laws**
- Work, Power and Energy**
- Momentum & systems**
- Circular Motion**
- Electrostatics**
- Circuits & Ohm's Law**
- Oscillations Waves & sound**

TEXT: *Physics for Scientists and Engineers, 2013*

GRADING SCALE:

| | |
|--------------|---|
| 90% – 100% | A |
| 80% - 89% | B |
| 70% - 79% | C |
| 60% - 69% | D |
| 59% or below | F |

GRADING RULES:

Unit Exams - 40%

Quizzes - 10%

Labs - 25%

Homework - 5%

Semester Exam - 20%