**Physics**

**Compiled by: Philip Giordano**

**WHAT EVERY STUDENT MUST KNOW BY THE END OF YEAR**

EACH STUDENT WILL BE ABLE TO:

1. Read, interpret and display graphical information.

2. Demonstrate understanding of linear, exponential, and circular motion using Newton’s Laws.

3. Use their knowledge of the transformation of energy to interpret the world

around them and how humans need for energy affects the planet.

4. Use skills and equations to understand the fundamental forces that drive

the universe.

5. Explain mathematically and conceptually the different types of waves and

how waves propagate.

6. Understand the intricate relationship between electricity and magnetism

and their consequences on both human society and the universe.

7. How sub atomic forces dictate the properties of the macroscopic world

and the probabilistic nature of particles and how we are using quantum physics today.

8. Use mathematical and logical reasoning.

9. Design experiments, execute them and interpret the results.