

International Physics

10th Grade Intl. [3 periods per week]

Ms. Angela Campbell

Course Description

10 International Physics is a lab-based course of instruction designed to prepare students for the successful study of physics in the Diploma Programme. The topics covered include:

Measurement and units

Waves and sounds

Forces and motion

Rays and waves

Forces and pressure

Electricity

Forces and energy

Magnets and currents

Thermal effects

Atoms and radioactivity

The textbook used is the Third Edition of the Complete Physics for Cambridge IGCSE by Stephen Pople.

Students are expected to conduct laboratory investigations that will help them build skills in

- Designing a controlled experiment
- Taking accurate measurements
- Accounting for sources of unavoidable error in their measurements
- Analyzing the data to find relationships and trends
- Drawing conclusions based on the data

In addition to these lab skills, students are expected to gain facility in choosing and applying the appropriate formula to analyze the relationship between variables.

Timeline

The first four or five topics are covered in units lasting 3-4 weeks during the first semester. The remaining topics are covered (as far as we can get in the time allowed) during the second semester. Each unit includes laboratory investigations that are designed to enhance the understanding of the topic as well as build lab skills.