IGCSE PHYSICS

Why should I choose Physics?

- In Physics you will gain confidence in a technological world.
- In Physics you will be aware of the application of science in everyday life which may be both helpful and harmful to the community and the environment.
- An excellent foundation for advanced study in pure sciences, in applied science or in science-dependent vocational courses.

Is it for me?

- Yes, if you are enthusiastic about science.
- Yes, if you want to know more about yourself and health issues which affect you.
- Yes, if you want to know more about the variety of life on Earth.
- Yes, if you enjoy practical work; designing and carrying out experiments.
- Yes, if you enjoy discussing issues.

Why study Cambridge IGCSE Physics?

As well as a subject focus, the Physics syllabus enables students to have:
- develop relevant attitudes, such as a concern for accuracy and precision, objectivity, integrity, enquiry, initiative and inventiveness
- an understanding of how scientific theories and methods have developed, and continue to develop
- an understanding of how groups and individuals work together
- better understand the influence and limitations placed on scientific study by society, technology and the environment
- Develop an understanding of the scientific skills essential for both further study and in everyday life.

Course Content:

The course content is divided into 5 main sections. The first three sections are covered in Year 10, the second two in Year 11:
1. General Physics (length and time, speed acceleration velocity, mass, density, forces, work, pressure, energy and power).
2. Thermal Physics (simple kinetic molecular of matter, thermal properties, transfer of thermal properties).
3. Properties of waves, including lights and sound (general wave properties).
4. Electricity and magnetism (simple phenomena of magnetism and electrical quantities).
5. Atomic Physics (Radioactivity and nuclear atom).

How will I learn?

A variety of learning methods are used throughout the course which include practical work, presentations, group work, audio-visual tasks, field research, essay writing and self-assessment.

How will I be assessed?

You will be assessed by two papers that test your understanding of the content covered: one multiple-choice (45 minutes and worth 30% of the total marks) and one extended written paper (75 minutes and 50% of the total); and a practical test (75 minutes and 20% of the total) that tests practical technique, data handling and analytical skills. The expectation at TIS is that all students will complete the extended CIE syllabus, covering IGCSE grades A*-D. Any student who is not meeting these expectations can be asked to take the core syllabus, covering IGCSE grades C-G.

Post 16 Opportunities:

Cambridge IGCSE Physics is accepted by universities and employers as proof of real ability and knowledge. Physics is an ideal foundation for:
- AS and A2 Physics, Chemistry, P.E., Design & Technology.
- Further and Higher qualifications in Physics and Engineering
Careers in which knowledge of Physics would be useful include:

- Engineering
- Architecture
- Teaching
- Construction
- Accountancy
- Law
- Astronomy
- Atomic Physics
- Electronics
- Aeronautics
- Space research
- Nanotechnology

Contact for further information

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