



Hampton Court House

Curriculum Outline 2019/20 – Year 11 Physics (JWM)

Autumn 2019

Principal Text: *AQA GCSE (9-1) Physics by CGP*

We start by examining in greater depth the topic of forces and motion. The pupils will have opportunities to practice their investigative skills. Towards the later part of this term we will cover atomic structure looking at the many applications of nuclear radiation.

Assessment of students' progress will be through a mixture of short quizzes in lessons, homework exercises and a more formal assessment from a bank of AQA past paper resources.

There will be two final exams at GCSE. The first exam will cover topics 1 to 4 which include energy; electricity; particle model of matter; and atomic structure. The second exam will cover topics 5 to 8 which include forces; waves; magnetism and electromagnetism; and space physics.

Links with fundamental values

The students have more practice of the Scientific Method which embraces evidence over opinion in order to understand and make sense of the world around them.

They will work on their own and in teams in order to promote resilience and mutual respect and tolerance of others. They will be encouraged to reflect on their own work and listen to the views of others.

Social, moral, spiritual and cultural content

We will provide an awareness of science as a social and cultural activity, which has strengths and limitations. The children's curiosity will be stimulated by demonstrating interesting scientific phenomena so they can appreciate and question the world around them. They will develop investigative abilities, paying due regard to safe practice.

We will acknowledge and recognise the contributions from scientists from around the world who have made significant contributions to the advancement of science.

Spring 2020

Principal Text: *AQA GCSE (9-1) Physics by CGP*

We will continue with the study of atomic structure and radiation. We will then begin our study of electromagnetism including magnets, magnetic fields, electromagnets and their importance for generating electricity.

The second half of the term will be dedicated to the study of the the Big Bang, the life cycle of stars and the formation of the solar system.

Summer 2020

Principal Text: *AQA GCSE (9-1) Physics by CGP*

Summer term will be dedicated exclusively for revision for the GCSE exams. Pupils will practice for the exams using past papers from AQA.