



Hampton Court House

Curriculum Outline 2019/20 – Year 11 Chemistry (TJMW)

Autumn 2019

Principal Text: *AQA GCSE 9-1 Chemistry by CGP*

All students continue from their Year 10 studies, looking at energy changes in chemical reactions. We then will study factors that affect the rate of a chemical reaction before moving on to study dynamic equilibrium systems.

Students will then look at organic chemistry. Students taking combined trilogy science will study the petrochemical industry and the uses of alkanes and alkenes. Those undertaking separate sciences will additionally study pharmaceuticals, plastics, and biochemicals.

There will then be an opportunity to revisit material from both years of the course in preparation for their mock examinations in January.

Pupils will continue to progress through the AQA GCSE course, delving into topics such as energy changes, rates of reaction, hydrocarbons and their uses, chemical analysis, and sustainable development.

There will be in class assessments and mock assessments. Students sit two written papers at the end of the course in June 2017.

Students can receive extra support with their revision of key topics by attending the Chemistry clinic on Thursdays during lunch.

Links with fundamental values
Fundamental values such as respect, liberty, democracy, and rule of law are integral to the classroom ethos.

Topics which additionally highlight such values include petrochemicals, pharmaceuticals, and chemicals in the environment and home.

Social, moral, spiritual and cultural content
Students will develop an appreciation for how chemistry shapes the world around them. Whether it is how the chemistry of concrete contributed to the rise of Rome, or how the rise and fall of DDT from a miracle of malaria prevention to a chemical pariah, they will see how chemistry is not only tangential to culture but integral to it! The moral and social implications of chemistry are never far from mind, particularly when teaching topics such as atmospheric chemistry or the chemical industry.

In addition the diversity of the scientists who have contributed to the field will be highlighted and celebrated.

Spring 2020

Principal Text: *AQA GCSE 9-1 Chemistry by CGP*

The spring term will begin with mock examinations for all students. These will be used to generate individualised revision priorities and topics where students require more support will be revisited.

Students will then investigate various methods of separating chemical mixtures and testing chemicals to identify unknown substances.

The course will end with topics looking at the chemistry of the atmosphere, the chemistry of clean drinking water, environmental chemistry, and chemistry in the home.

Summer 2020

Principal Text: *AQA GCSE 9-1 Chemistry by CGP*

During this term we will prepare for the GCSE examinations by revising key topics, completing past papers, and focusing on exam technique.