British Values in Science

- Respect civil and criminal law

Law is an integral part of science. New research into drug design, stem cell technology, genetic engineering, mining, engineering, mobile phone and computer research all have to follow strict laws that govern their safety and application.

From patenting work to following British Safety Standards to destroying a cloned embryo before the cells can specialise, civil and criminal law must be considered by all scientists developing new and existing technology.

Students are challenged to understand the reasoning behind such laws and how legislation can differ between different countries and how this may impact upon Britain itself. An example is the easing of America's stance on genetic modification research has led to many scientists leaving Britain to get bigger grants in America.

We actively promote civic institutions so that students value and appreciate the local the Health system, the Police, the justice system and Social Services and how Science has an active role in the day to day functioning of these establishments.

- Appreciate viewpoints of others on ethical issues

Science has many complex ethical issues from genetic engineering, cloning, drug testing and pollution to nuclear power stations.

Students are expected to weigh up both sides of any argument and provided a reasoned response that underpins their own stance to these issues.

This is done through debates, links with industry, Science Week events, examinations and Research Prep tasks.

- Acceptance and engagement with fundamental British values of democracy

Science is a universal language and discipline that can be used anywhere in the world regardless of race, language or religion. We show, through initiatives such as the Human Genome Project, how Scientists collaborate worldwide to share data, theories and conclusions. The physics behind building a bridge are the same in Britain as they are in Nairobi. The element Gold has the same symbol in the periodic table regardless of whether it is English or Arabic being spoken.

Through topics such as evolution, biodiversity and variation, we emphasise how we are all the same species regardless of ethnicity, background or beliefs. This supports the British ethos behind democracy.

- Contribute positively to life in Modern Britain

From inventing the World Wide Web, to mobile phones, laptops, electricity, televisions, bicycles, Stem Cell Transplants, DNA Fingerprinting and Marmite, no other country has contributed so much to modern life in the 21st Century. The Science Faculty promotes this through its teaching and through its elevation of such notable scientists as Charles Darwin, Robert Hooke, Stephen Hawking, Watson and Crick, Rosalind Franklyn and Jocelyn Bell Burnell.

By setting these examples and role models, we endeavour to support a new wave of scientists who will contribute positively to modern Britain. In 2014, the majority of our highest achieving students at Ursuline High School went on to study science based courses at the best Universities in the country.

The Science faculty consistently has the highest number of prefects in the Sixth Form who carry out the ethos of “Serviam.”

The fundamental principle of Science is to understand the world in such a fashion so as to improve the quality of life for all species that inhabit it.