Course Description

Chemistry

Module 1 - Development of practical skills in Chemistry
Skills of planning, implementing, analysis and evaluation

Module 2 - Foundations in Chemistry

Atoms, compounds, molecules and equations, amount of substance, acid-base and redox reactions, electrons, bonding and structure

Module 3 - Periodic table and energy

Periodic table, Group 2 and halogens, qualitative analysis, enthalpy changes, reaction rates and equilibrium

Module 4 - Core organic Chemistry

Basic concepts, hydrocarbons, alcohols and halo-alkanes, organic synthesis, analytical techniques (IR, MS)

Module 5 - Physical Chemistry and transition elements

Reaction rates and equilibria, pH and buffers, enthalpy, entropy and free energy, redox and electrode potentials, transition elements

Module 6 - Organic Chemistry and analysis

Aromatic compounds, carbonyl compounds, carboxylic acids and esters, nitrogen compounds, polymers, organic synthesis, chromatography and spectroscopy (NMR)

Assessment: The Chemistry A level qualification is assessed through three written examinations at the end of Year 13. There are two written examinations for AS year. Students must also complete a Practical endorsement which is reported separately as Pass or Fail.

Entry Criteria

Separate Science. Students must have a Grade 7 in the Science they wish to study with at least a Grade 6 in the others. Students must have a Grade 6 in Mathematics.

Combined Science. Students must have a Grade 7,7 in Combined Science with at least a Grade 6 in Mathematics.

At the start of the year, all students will sit a 'Head Start Test' to establish a baseline for progress monitoring and to confirm they meet the course requirements.

Exam Board: OCR
Specification link: https://www.ocr.org.uk/qualifications/as-and-a-level/chemistry-a-h032-h432-from-2015/specification-at-a-glance/

SOUTHAM COLLEGE SIXTH FORM