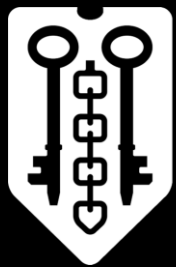


# Sixth Form Information Evening

Thursday 11th November 2021



Pool Hayes  
Academy



Chemistry



# Course content

Content is in six modules, each divided into key topics:

**Module 1 – Development of practical skills in chemistry**

**Module 2 – Foundations in chemistry**

**Module 3 – Periodic table and energy**

**Module 4 – Core organic chemistry**

**Module 5 – Physical chemistry and transition elements**

**Module 6 – Organic chemistry and analysis**

# Course Two Year Plan

- Year 12
- **Module 2 – Foundations of chemistry**
  - Atoms, compounds, molecules and equations
  - Amount of substance
  - Acid–base and redox reactions
  - Electrons, bonding and structure
- **Module 3 – Periodic table and energy**
  - The periodic table and periodicity
  - Group 2 and the halogens
  - Qualitative analysis
  - Enthalpy changes
  - Reaction rates and equilibrium (qualitative)
- **Module 4 – Core organic chemistry**
  - Basic concepts
  - Hydrocarbons
  - Alcohols and haloalkanes
  - Organic synthesis
  - Analytical techniques (IR and MS)

# Course Two Year Plan

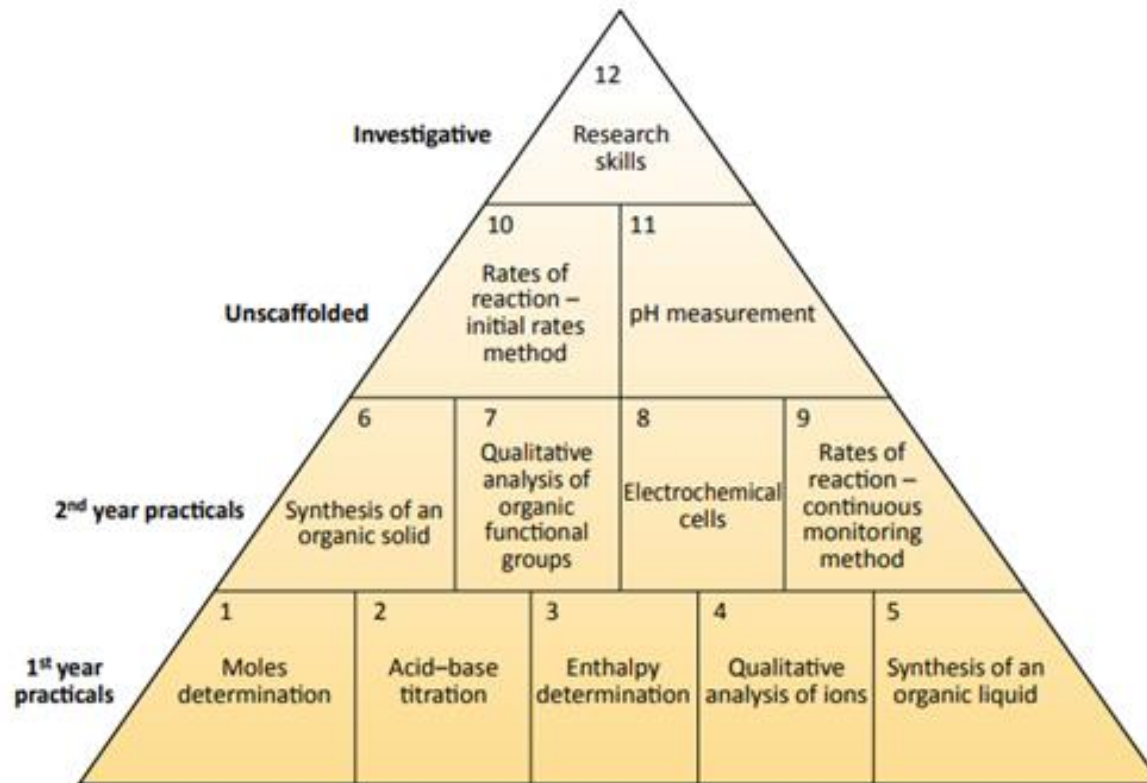
- Year 12
  - **Module 2 – Foundations of chemistry**
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  - **Module 4 – Core organic chemistry**
    - Basic concepts
    - Hydrocarbons
    - Alcohols and haloalkanes
    - Organic synthesis
    - Analytical techniques (IR and MS)
- Year 13
  - **Module 5 – Physical chemistry and transition elements**
    - Reaction rates and equilibrium (quantitative)
    - 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)

# Practical endorsement

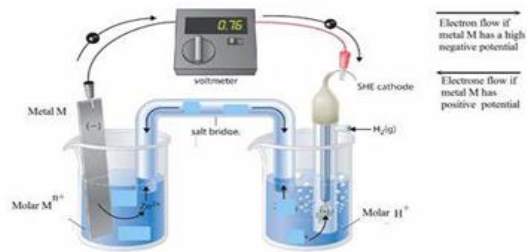
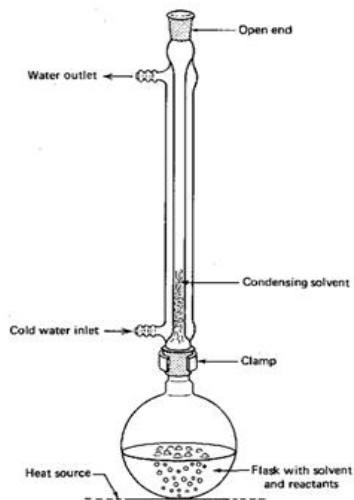
## 5g. Practical endorsement

The Practical Endorsement is common across Chemistry A and Chemistry B (Salters). It requires a minimum of 12 practical activities to be completed

from the Practical Activity Groups (PAGs) defined below (Fig. 1).



# Some of the experiments



# Future Prospects

Chemical engineer

Pharmacist

Environmental Science

Biochemist

Research and  
development

Forensic Science

## Industrial Chemistry

e.g. Agrochemistry, metallurgy, petrochemicals, pharmaceuticals



Pool Hayes  
Academy

+ many non-science careers

