

# Chemistry

## Cemeg

Level: 3  
Syllabus: WJEC  
Duration of Course: 1/2 years  
Course Venue: The John Frost School

### Course Outline

The AS and course consists of 2 theoretical units whereas the A2 course consists of 2 theoretical units and a practical assessment. The year 12 course will lead to an AS in Chemistry. The year 13 course will lead to an A level in Chemistry.

### Entry Requirements

A grade B or higher in GCSE Double Award Science, or GCSE Chemistry is preferable to ensure success at A Level Chemistry.

### What will I study?

#### AS:

Unit 1: 'The Language of Chemistry, structure of matter and simple reactions' including: chemical calculations, bonding and the periodic table.

Unit 2: 'Energy, rate and chemistry of carbon compounds' including: thermochemistry, rates of reaction, carbon chemistry and instrumental analysis.

#### A2:

Unit 3: 'Physical and inorganic chemistry' including: redox reaction, chemistry of the *p*-block and *d*-block and chemical kinetics.

Unit 4: 'Organic Chemistry and analysis' including: stereoisomerism, aromaticity, chemical groups and organic synthesis and analysis.

Unit 5: Practical Examination which consists of an experimental task and a practical methods and analysis task

### How will I be assessed?

#### AS Chemistry:

Unit 1: External Examination, 1 hour 30 minutes, 50% of AS grade (20% final A2 grade)

Unit 2: External Examination, 1 hour 30 minutes, 50% of AS grade (20% final A2 grade)

#### A2 Biology:

Unit 3: External Examination, 1 hour 45 minutes, 25% final A2 grade

Unit 4: External Examination, 1 hour 45 minutes, 25% final A2 grade

Unit 5: Practical Examination, consisting of a 3 hour experimental session followed by a 1 hour written paper, 10% final A2 grade

### Career Opportunities and Progression

This course provides a sound basis for progression to the further study of chemistry and for courses and employment in the related fields of medicine, health, environment, engineering, forensics, and biochemistry, for example. Due to its breadth and variety, Chemistry AS/A level provides an interesting and relevant course that links well with a number of other courses. It also develops key skills needed to access many higher education courses.