Sir Robert Pattinson Academy
Via diversa vita una

2021-22 Course Details

A-Level Chemistry (OCR)

Chemistry helps us understand the world in which we live. Pick up a can of soft drink and you'll find chemistry everywhere, from the metal can to the paint used to cover it and the liquid inside. Chemists study how atoms work and combine in different conditions, using experiments and knowledge to develop medicines, foods, fabrics and many other materials.

Chemistry will help you to develop research, teamwork, numeracy, communication, problem solving and analytical skills, as well as valuable independent study and reasoning skills. Chemistry allows you to get ahead in most STEM careers and opens up a range of opportunities such as Medicine, Chemical Engineering, Clinical Biochemistry, Pharmacology, Toxicology, Forensic Science, Environmental Science and Research and Development.

Qualities and qualifications needed

Grade 6 in GCSE Chemistry, Biology and Physics or Grade 6,6 in Combined Science. Additionally, a Grade 6 or above in Mathematics is required to cope with the mathematical demands of this course.

A willingness to learn and be challenged, you will need to be organised, self-motivated with sound scientific knowledge and independent learning skills.

How will the course be assessed?

Formal assessment includes:

- Home Learning Assessments
- End of topics tests
- Practical assessment

This course is 100% examination at the end of Year 13.

There is no coursework element or opportunity to resit any examination during the two-years.

Practical Endorsement is achieved through the demonstration of a variety of practical techniques.

Course content

Chemistry A-Level is designed to develop theoretical and practical chemistry skills, knowledge and understanding. The modules are:

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

The development of practical skills (Module 1) is embedded through the whole course, with the practical endorsement being achieved by successfully completing a range of practical activities.

Examinations

All modules are assessed via terminal examination. There are 3 papers:

Paper 1
2 hours 15 minutes
Content from modules 1, 2, 3 & 5.
(37% of the total A-Level).

Paper 2
2 hours 15 minutes
Content from modules 1, 2, 4 & 6.
(37% of the total A-Level).

Paper 3
1 hour 30 minutes
Content from all modules.
(26% of the total A-Level).

Methods of teaching and learning

The course is designed to be stimulating, enjoyable and challenging with the teaching of theory complimented by many practical activities such as the synthesis of aspirin. Guided learning is accompanied by frequent formal and informal assessment throughout to check understanding. Promoting student discussion and creating opportunities for active problem solving in class, as well as pre-assimilation of topics prior to learning, develops independence and confidence.

> The support that teachers give pupils, and that pupils give each other, helps make the school the caring community that it is.

SRPA student