



Introduction

The A level Chemistry syllabus places practical work in a central, all-encompassing role throughout the course. In this way, the essence of Chemistry, its use and significance in society are emphasised, and how it provides a vehicle for understanding, acquisition of vital skills and enjoyment. As part of the new A level course pupils now complete a series of Core Practicals (16 in total) which leads to the awarding of the practical endorsement qualification at the end of Year 13. In this way, A levels pupils around the world will enter university in the UK (or elsewhere) sure of possessing the basic skills required to succeed in a science based degree.

The inherent objective of recent changes to the syllabus has been to update the Chemistry taught in schools to incorporate more modern aspects of the subject, new techniques, and contemporary issues that affect our lives.

Content

A level – Year 12

Term 1:

- Further Equilibrium
- Acid base Equilibria
- Further Energetics
- Further Redox

Term 2 / 3:

- Transition Metals
- Further Kinetics
- Further Organic Chemistry

Year 13

Term 1:

- Topic 1: Atomic Structure and the Periodic Table
- Topic 2: Bonding and Structure
- Topic 3: Redox I
- Topic 4: Inorganic Chemistry and the Periodic Table
- Topic 5: Formulae, Equations and Amounts of Substance

Term 2 / 3:

- Term 2 / 3:
- Topic 2: Bonding and Structure
- Topic 5: Formulae, Equations and Amounts of Substance
- Topic 6: Organic Chemistry I
- Topic 7: Modern Analytical Techniques I
- Topic 8: Energetics I

- Topic 9: Kinetics I
- Topic 10: Equilibrium I

Skills

The following key skills are embedded in the curriculum:

- Application of number
- Communication
- Information and Communication Technology
- Improving learning and performance
- Problem solving
- Working with others

Homework

Students can expect to receive up to 5 hours of homework per week. This will be in the form of written assignments, practice questions, practical reports, online quizzes and learning tasks.

Assessment

Internal Examinations:

- There will be internal exams in Year 12 based on the material covered.
- There are tests after each topic (5 or 6 per term) and a weekly series of online quizzes to ensure that pupils are making progress.

External Examinations (taken at the end of Year 13):

- Students are expected to carry out the sixteen core practical experiments that are identified in the topics.
- Students must complete all assessment in May/June in any single year.

Paper 1, Advanced Inorganic and Physical Chemistry (30% of the total qualification):

- Assessment is 1 hour 45 minutes.
- The paper consists of 90 marks.
- The paper may include multiple-choice, short open, open-response, calculations and extended writing questions.

Paper 2, Advanced Organic and Physical Chemistry (30% of the total qualification):

- Assessment is 1 hour 45 minutes.
- The paper consists of 90 marks.
- The paper may include multiple-choice, short open, open-response, calculations and extended writing questions.

Paper 3: General and Practical Principles in Chemistry

Overview of content:

- Questions in this paper may draw on any of the topics in this specification.
- The paper will include synoptic questions that may draw on two or more different topics listed.
- The paper will include questions that assess conceptual and theoretical understanding of experimental methods (indirect practical skills) that will draw on students' experiences of the core practicals.
- Overview of assessment
- Assessment is 2 hours 30 minutes.

- The paper consists of 120 marks.
- The paper may include short open, open-response, calculations and extended writing questions.

Digital usage in this subject

A level Chemistry students access all resources including topic slides, worksheets, syllabus specification, textbook answers and mark schemes via google classroom. Core practical write ups are handed in as pdf format and marked online in google classroom. The marked practical write ups are stored electronically but also printed out and stored in a physical folder kept in the laboratory.

Weekly homework is set on the application Seneca.

Resources and Materials

The following materials are provided:

- Year 13 Text Book
- Workbook
- Revision guide
- The Edexcel website: www.edexcel.org.uk
- Excellent laboratory facilities with vanguard equipment and comprehensive resources

Applications and websites habitually used

[MaChemGuy](#)

[Allery Chemistry](#)

[Snaprevise](#)