CHEMISTRY

THE LADY ELIZABETH SCHOOL

Finding Solutions

AS/A2 international Advanced Level Chemistry

Examination Board: Edexcel International

LEVEL: AS AND A2
EXAM TIMING: JANUARY, JUNE AND OCTOBER
WHAT DO I NEED TO BE ABLE TO STUDY THIS SUBJECT AT A-LEVEL?

The qualification builds on the knowledge, understanding and process skills that you achieved in IGCSE Science, Additional Science and Chemistry, or applied science courses such as the BTEC First Certificate in Applied Science. It is expected that you should have at least the equivalent of an IGCSE grade B in Chemistry or Additional Science, and a GCSE grade C in Mathematics. Pupils who achieved a C grade at GCSE may be considered on an Individual-Contract basis – covering specific targets to be met in the first weeks of the course.

In chemistry you will need to be able to communicate effectively, be able to carry out research, work independently and critically think about problems. Good practical skills are also important as chemistry is a very practical subject.

WHAT WILL I STUDY?

Students will study aspects of chemistry that are often in the media and affect their lives. It is important that students have the necessary knowledge and understanding to explain many different aspects of contemporary chemistry. These areas include:

- climate change
- green chemistry
- pharmaceuticals
- chemistry research

The content of this specification includes the fundamental key concepts of chemistry needed for progression into higher education and employment. However, it has been streamlined to allow students enough time to study the units in depth. This ensures that the teaching and learning experience is enjoyable.

WHAT WILL I STUDY continued...

The International Advanced Subsidiary is the first half of the International Advanced Level course and consists of Units 1, 2 and 3. It may be awarded as a discrete qualification or contribute 50 per cent of the total International Advanced Level marks. The full International Advanced Level award consists of the three IAS units (Units 1, 2 and 3), plus three IA2 units (Units 4, 5 and 6) which make up the other 50 per cent of the International Advanced Level. Students wishing to take the full International Advanced Level must, therefore, complete all six units.

Unit 1: Structure, Bonding and Introduction to Organic Chemistry
Unit 2: Energetics, Group Chemistry, Halogenoalkanes and Alcohols
Unit 3: Practical Skills in Chemistry I
Unit 4: Rates, Equilibria and Further Organic Chemistry
Unit 5: Transition Metals and Organic Nitrogen Chemistry
Unit 6: Practical Skills in Chemistry II

IS THIS SUBJECT RIGHT FOR ME?

The aims of the International Advanced Level in Chemistry enable students to develop:
- an interest in, and enthusiasm, for chemistry including developing an interest in further study and careers in chemistry
- an appreciation of how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society
- a deeper understanding of the skills, knowledge and understanding of How Science Works
- essential knowledge and understanding of different areas of the subject and how they relate to each other.

HOW WILL I BE ASSESSED?

Structure:
The Pearson Edexcel International Advanced Subsidiary in Chemistry and the Pearson Edexcel International Advanced Level in Chemistry are modular qualifications. The Advanced Subsidiary can be claimed on completion of the International Advanced Subsidiary (IAS) units. The International Advanced Level can be claimed on completion of all the units (IAS and IA2 units).

Assessment
Assessment consists of three written papers at IAS level that are externally assessed. The International A level consists of three further written papers that are externally assessed. Exams are available in January, June and October.

WHAT CAN I DO AFTER I'VE COMPLETED THE COURSE?

Many employers view success at IAL Chemistry as a clear indication of sound academic ability. Many university courses have a significant proportion of chemistry content and an IAL in Chemistry from Edexcel is excellent preparation for such further study. UK HE institutions currently offer over 200 courses where chemistry is the primary subject. Often these courses can include an additional year's study, either in industry or at a university abroad. Some courses can include study in other related areas. Examples include:

- chemistry with medicinal chemistry
- chemistry with forensic science and toxicology
- chemistry with pharmacology.

Over 500 additional courses contain a notable element of chemistry as well as allowing a degree of breadth of study. These include:

- chemistry and sports science
- chemistry and politics
- chemistry with computer science.

In addition a number of other courses either specifically require or find it desirable to have an IAL in Chemistry.

These include courses such as chemical engineering, medicine, veterinary medicine, biological sciences, environmental science, pharmacy and dentistry.

NEXT STEPS:

Useful websites:

https://qualifications.pearson.com/en/qualifications/edexcel-international-advanced-levels/chemistry-2018.html

https://www.prospects.ac.uk/careers-advice/what-can-i-do-with-my-degree/chemistry

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