



Co-op Academy
Bebington

SIXTH FORM – SUBJECT INFORMATION

A Level Biology - AQA

Entry Requirements:

5 GCSEs at grade 4 or above including Maths at grade 4 and Science at Grade 66.

Is this course for me?

In this course you will learn about a variety of different aspect of Biology in the following units;

- Biological molecules
- Cells, transport & the immune system
- Exchange and mass transport
- DNA, genes and protein synthesis
- Genetic diversity & biodiversity
- Photosynthesis, respiration and energy transfer
- Response to stimuli, nervous so-ordination & muscle contraction
- Homeostasis
- Genetics, population and evolution
- Populations in ecosystems.
- Control of gene expression
- Recombinant DNA technology

Where does it lead?

There are a whole variety of careers that students can continue into as well as further study.

Possible careers and further study include;

Medicine, Dentistry, Veterinary Science, Nursing, Zoology, Marine Biologist, Sport Science Support, Teaching, Healthcare, Optometry, Pharmacy, Physiotherapy and Forensic Science. However, studying a Science based A Level provides the analytical and critical thinking skills that are highly regarded in other non-Science based careers and industries.

How will I be assessed?

You will be assessed throughout the year through past exam questions, extended written work, research based work along with the required practical skills to support you in gaining the practical endorsement at A Level.

Your terminal examinations at the end of the 2 year course will comprise 3 exam papers of 2 hours in length.

If you require more information, please contact Mr Marsh.



SIXTH FORM – SUBJECT INFORMATION

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A Level Chemistry - AQA

Entry Requirements:

5 GCSEs at grade 4 or above including Maths at grade 5 and Science at Grade 66.

Is this course for me?

In this course you will learn about a variety of different aspect of Chemistry in the following units;

- Atomic structure, amount of substances, bonding and energetics.
- Kinetics, equilibria, redox, periodicity
- Alkaline earth metals, halogens, organic chemistry, alkanes, haloalkanes, alkenes
- Alcohols and organic analysis
- Further physical chemistry including thermodynamics, rate equations, equilibrium constants and acids and bases.
- Further inorganic chemistry including properties of group 3 elements & their oxides, transition metals & reactions of ions in solution
- Further organic chemistry including aldehydes and ketones, carboxylic acids, aromatic chemistry, amines and polymers, amino acids, DNA and proteins, organic synthesis, NMR and chromatography.

Where does it lead?

There are a whole variety of careers that students can continue into as well as further study.

Possible careers and further study include;

Medicine, Dentistry, Veterinary Science, Sport Science Support, Teaching, Healthcare, Pharmacology, Petrochemical Industries, Energy Management, Chemical Engineering and Forensic Science.

However, studying a Science based A Level provides the analytical and critical thinking skills that are highly regarded in other non-Science based careers and industries.

How will I be assessed?

You will be assessed throughout the year through past exam questions, extended written work, research based work along with the required practical skills to support you in gaining the practical endorsement at A Level.

Your terminal examinations at the end of the 2 year course will comprise 3 exam papers of 2 hours in length.

If you require more information, please contact Mr Marsh.



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SIXTH FORM – SUBJECT INFORMATION

BTEC Applied Science RQF (Extended Certificate) - EDEXCEL

Entry Requirements:

5 GCSEs at grade 5 or above including Science at Grade 55.

The course is the equivalent of 1X A Level

Is this course for me?

In this course you will learn about a variety of different aspect of Biology, Chemistry and Physics in an applied context in the following compulsory units;

- Principles and Applications of Science 1 (GLH = 90)
- Practical Scientific Procedures and Techniques (GLH = 90)
- Science Investigation Skills (GLH =120)

Students will then study an optional unit from the BTEC course to make up the 60 GLH (Guided learning hours) required for the Extended Certificate.

Where does it lead?

There are a whole variety of careers that students can continue into as well as further study.

Possible careers and further study include;

Laboratory Technicians, Manufacture, Sport science support, Research assistants, Forensic Science, Health care, Dental Technician, Health and Safety and Analytical work. However, studying for a Science based qualifications provides the analytical and critical thinking skills that are highly regarded in other non-Science based careers and industries.

How will I be assessed?

Students will be assessed through internally assessed (externally validated) portfolio's of evidence plus 2X externally set and assessed examinations. 58% Exam : 42% Portfolio.



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SIXTH FORM – SUBJECT INFORMATION

BTEC Forensic and Criminal Investigation RQF (National Foundation Diploma) - EDEXCEL

Entry Requirements:

5 GCSEs at grade 5 or above including Science at Grade 55.

The course is equivalent to 1.5X A Level

Is this course for me?

In this course you will learn about a variety of different aspects of applied Biology, Chemistry, Physics and criminal Psychology in a forensic and criminology context in the following compulsory units;

- Principles and Applications of Science 1 (GLH = 90)
- Practical Scientific Procedures and Techniques (GLH = 90)
- Science Investigation Skills (GLH =120)
- Forensic Investigation Procedures in Practice (GLH = 90)

Students will then study two optional units from the BTEC course to make up the 120 GLH (Guided learning hours) required for the Foundation Diploma.

Where does it lead?

There are a whole variety of careers that students can continue into as well as further study.
Possible careers and further study include;

Laboratory Technicians, Manufacture, Sport science support, Research assistants, Forensic Science, Health care, Dental Technician, Health and Safety and Analytical work. However, studying for a Science based qualifications provides the analytical and critical thinking skills that are highly regarded in other non-Science based careers and industries.

How will I be assessed?

Students will be assessed through internally assessed (externally validated) portfolio's of evidence plus 2X externally set and assessed examinations. 41% Exam : 59% Portfolio.



SIXTH FORM – SUBJECT INFORMATION

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A Level Physics - AQA

Entry Requirements:

5 GCSEs at grade 4 or above including Maths at grade 5 and Science at Grade 66.

Is this course for me?

In this course you will learn about a variety of different aspect of Physics in the following units;

- Measurements and their errors
- Particles and radiation
- Waves
- Mechanics and materials
- Electricity
- Further mechanics and thermal physics
- Fields and their consequences
- Nuclear physics

Plus an option unit from;

- Astrophysics, Medical physics, Engineering physics, Turning points in physics, Electronics

Where does it lead?

There are a whole variety of careers that students can continue into as well as further study.

Possible careers and further study include;

Acoustic consultant, Astronomer, Clinical scientist, medical physics, Geophysicist, Higher education lecturer, Metallurgist, Meteorologist, Nanotechnologist, Radiation protection practitioner, Research scientist (physical sciences) and Technical author. However, studying for a Science based qualifications provides the analytical and critical thinking skills that are highly regarded in other non-Science based careers and industries.

How will I be assessed?

You will be assessed throughout the year through past exam questions, extended written work, research based work along with the required practical skills to support you in gaining the practical endorsement at A Level.

Your terminal examinations at the end of the 2 year course will comprise 3 exam papers of 2 hours in length. If you require more information, please contact Mr Marsh.