Formby High School
Sixth Form

BTEC Level 3 National Extended Certificate in Applied Science

Why study Applied Science at Formby High School?

Science is the cornerstone of life in the 21st Century. Whether it is developing new vaccines, creating greener fuels or looking at colonising Mars. The Applied Science course covers a wide range of topics across Biology, Chemistry and Physics and will allow you to acquire a high level of practical laboratory skills as well as become familiar with some complex scientific theory. Through this you will understand the role of the scientist, their relationship with the scientific community and their responsibilities towards their community and the environment.

This course offers an alternative route to the traditional A Level Sciences as it is designed for students wanting context and vocational based learning in Biology, Chemistry and Physics. The course is equivalent to one A Level, offers a fundamentally learner-centered approach and is coursework based, with some examination and externally assessed units.

This course is great for students who enjoy Science and want a more hands on approach to learning and assessment. It is a good choice for students who don't feel like they can specialise in just one science. It is also suitable for students unsure if they will obtain the grades required to access the A Level science courses.

What does the course involve?

The course is made up of 4 units of which 3 are mandatory. The optional unit will be chosen based on staff and student preference.

- Unit 1: Principles and Applications of Science
- Unit 2: Practical Scientific Procedures and Techniques
- Unit 3: Science Investigation Skills
- Unit 4: Optional Unit

In Unit 1 students will cover some of the key science concepts in Biology, Chemistry and Physics. This includes how muscles work, how chemical substances are made and how waves are used for communication in devices such as phones. This is assessed by an externally marked examination.

In Unit 2 students will be introduced to quantitative laboratory techniques, calibration, chromatography, calorimetry and laboratory safety, which are relevant to the chemical and life science industries. This is assessed through practical activities and written coursework.

In Unit 3 students will cover the stages involved and the skills needed in planning a scientific investigation: how to record, interpret, draw scientific conclusions and evaluate. This is assessed via a written planning task and is marked externally by the examination board.

Unit 4 is a shorter option module and gives us the opportunity to tailor the course to students' interests and strengths.

What can the qualification lead to?

Studying Applied Science opens up a wild field of job opportunities and higher education courses. Careers range from marine biologist to clinical psychologist. The BTEC course can accrue students UCAS points so they can go on and study their passions further. This includes subjects such as nursing when studied with other required subjects. The course provides students with practical laboratory experiences that prepare students for laboratory based apprenticeships.

What are the entry requirements?

Grade 4-4 in GCSE Combined Science (Trilogy or Synergy) or a grade 4 in two Separate Sciences. In addition, students require a grade 4 in GCSE Mathematics and GCSE English Language.

Which other subjects complement Applied Science?

- Other Level 3 Vocational and Technical Qualifications, including Engineering, and A Level courses

Courses will require a minimum number of five students in order to run.