

Why this subject?

The National Extended Certificate in Applied Science is a course that is designed for learners who are interested in learning about the sector alongside other fields of study, with a view to progressing to a wide range of higher education courses, not necessarily in applied science. The requirements of the qualification will mean that students develop the transferable and higher order skills which are valued by higher education providers and employers. You will develop laboratory and collaboration skills, in addition to the scientific knowledge and understanding needed to progress to higher education, employment or training.

Course Outline

Year 12

Unit 1 – Principles and Applications of Biology :

You will study the structure and function of cells and tissues, biological molecules, enzymes and their role in organisms.

Unit 2 – Principles and Applications of Chemistry:

You will study the structure of the Periodic Table and its implications on physical and chemical properties of substances, through analysis of different bonding methods.

Unit 3 – Principles and Applications of Physics:

You will study waves and their applications; force principles and their application in transportation and construction of electrical circuits.

Year 13

Unit 4— Practical Scientific Procedures and Techniques :

You will be introduced to quantitative laboratory techniques, including chromatography, colorimetry and laboratory safety, which are relevant to the scientific laboratory environments.

Unit 5—Scientific investigation skills:

You will develop the skills needed for investigative research, including planning, data collection, analysis and evaluation.



Key Information

Exam Board	Edexcel Pearson
Qualification Type	Level 3 AAQ BTEC
Entry Requirements	GCSE Combined Science Grade 4/4
Subject Lead	Mrs McCarthy

Assessment Outline

Students undertake a combination of external and internal assessments over the two years:

Unit 1 - Principles and Applications of Biology:

Unit weighting – 60 hours

External exam x 1 hour

1

Unit 2 - Principles and Applications of Chemistry:

Unit weighting - 60 hours.

1 External exam x 1 hour

Unit 3 - Principles and Applications of Physics:

Unit weighting—60 hours

1 External exam x 1 hour

Unit 4— Practical Scientific Procedures and Techniques :

Unit weighting— 90 hours

Internal assessment through completion of assignments, which will require the use of practical techniques and procedures.

Unit 5—Scientific investigation skills:

Unit weighting—90 hours

Internal assessment through the completion of an independent investigative project.

Careers and next steps

BTEC Level 3 Nationals qualify for UCAS points towards your university application in the same way as A Levels.

After completing the course, students can progress directly into work, apprenticeships or a wide range of science-based degree level courses, such as Biomedical Engineering, Chemistry, Environmental Science,