

# Course Description

## Pearson Level 3 Alternative Academic Qualification BTEC National in Applied Science

This course enables students to study the principles and applications of biology, chemistry and physics, as well as practical scientific procedures & techniques.

### What skills will I develop?

- Fundamental scientific principles and applied knowledge relating to biology, chemistry and physics
- Laboratory techniques, including health and safety assessment, and associated professional practice
- Critical thinking.
- Scientific Research skills including researching and planning methodologies, primary data collection and analysis, drawing justified conclusion

### What will I study?

This qualification has five units covering the following topics:

- **Principles and Applications of Biology** (1 hour exam) – Structure and function of cells and tissues, biological molecules, enzymes and their role in organisms
- **Principles and Applications of Chemistry** (1 hour exam) – Structure of the Periodic Table and its implications on physical and chemical properties of substances, through analysis of different bonding methods
- **Principles and Applications of Physics** (1 hour exam) – Waves and their applications; force principles and their application in transportation and construction of electrical circuits
- **Practical Scientific Procedures and Techniques** (internally assessed practical work and analysis) – Practical applications across the sciences, including chromatography, colorimetry and electrical circuits
- **Scientific Investigation Skills** (internally assessed investigation/ project) – Investigative research, including planning, data collection, analysis and evaluation

Many of these topic will build on material covered at GCSE.

The qualification is designed to be taken alongside A Levels and will combine with subjects such as Psychology, PE and Geography.

The course is intended for students that wish to progress into higher education as a pathway to employment in many areas of science and health care, for example, paramedic science, nursing, teaching, biomedical sciences etc.

### Entry Criteria

Grade 55 in Combined Science, or grade 5 in all three separate sciences.

Exam Board: PEARSON

Specification link: <https://qualifications.pearson.com/en/qualifications/btec-nationals/applied-science-aaq.html>