



# Applied Science BTEC

## Why take this subject?

If you are a passionate Scientist, Applied Science might be the course for you! It keeps your involvement with Science quite broad, rather than specialising in just Biology, Chemistry, or Physics. You will be assessed by completing coursework units and by sitting four written exams. Successful BTEC students work extremely hard, meet deadlines and act on feedback.

## What do I need to have studied in year 11?

- You must have at least 5 GCSEs at grades 9-4 including English and Maths
- At least a Grade 5/5 in the Double Science or 5/5/5 in Biology, Chemistry and Physics

## What will we study?

### Year 12

Unit 1 - This unit is about developing a good understanding of the core science concepts, including animal and plant cells; tissues; atomic structure and bonding; chemical and physical properties of substances related to their uses; waves and their application in communications.

Unit 3 - Learners will cover the stages involved and the skills needed in planning a scientific investigation: how to record, interpret, draw scientific conclusions and evaluate. These skills will be delivered through subject themes ranging from enzymes and diffusion to electrical circuits.

### Year 13

Unit 2 - This unit introduces you to standard laboratory equipment and techniques, including titration, colorimetry, calorimetry, chromatography, calibration procedures and laboratory safety.

Unit 8 - In this unit, you will focus on three human body systems: musculoskeletal, lymphatic and digestive. You will examine each of the systems as a functioning unit, identifying their structure and function. By exploring the anatomy of these systems, you will develop your knowledge and understanding of their role in the human body. This unit could be changed in future, depending on teacher/learner preference as it is one of a number of units that can be studied.

## How will I be examined?

At Hertswood, we offer a Pearson BTEC Level 3 National Extended Certificate in Applied Science which is equivalent to one A-Level qualification.

Unit	Assessment	Weighting
1 - Principles and Applications of Science I	3 x 40 minute exams set and marked by Pearson	25%
2 - Practical Scientific Procedures and Techniques	Internally-assessed coursework unit	25%
3 - Science Investigation Skills	A task set and marked by Pearson and completed under supervised conditions.	33%
8 - Physiology of Human Body Systems	Internally-assessed coursework unit	17%

## What super curricular opportunities will be available to me?

Hertswood Academy has historically worked with the Royal Institution, Salters' Society and others at the forefront of Science research and we hope that opportunities will arise for you to benefit from their support.

## What can this subject lead to?

Employers and Universities respect the Applied Science BTEC course as it gives learners a wide range of skills and knowledge. There are lots of Science-related courses where the qualification is particularly valued, including Midwifery, Ecology, Forensic Science and Sport Science. You do need to be aware that some degree subjects, including Biology, Chemistry, Physics and Medicine tend to require two or more Science and Maths grades at A-Level or equivalent, so BTEC Applied Science on its own would not be sufficient for entry there. Do your research before committing to the course!

## Subject Specification -

[https://qualifications.pearson.com/content/dam/pdf/BTEC-Nationals/Applied-Science/2016/specification-and-sample-assessments/9781446938164\\_BTECNat\\_AppSci\\_ExtCert\\_Spec.pdf](https://qualifications.pearson.com/content/dam/pdf/BTEC-Nationals/Applied-Science/2016/specification-and-sample-assessments/9781446938164_BTECNat_AppSci_ExtCert_Spec.pdf)