

Why this subject?

The National Extended Certificate in Applied Science is a course that is designed for learners who are interested in the practical aspect of scientific study. The course encompasses a significant amount of practical work and will ensure that you leave Churchdown Sixth Form with a firm understanding of the scientific techniques used within industry. You will study the human body in detail, including the digestive system, musculoskeletal system and lymphatic system. You will also further your current knowledge and understanding of the periodic table and waves.

Course Outline

Year 12

Unit 1 – Principles and Applications of Science

Biology – Cells

Chemistry – The Periodic Table

Physics – Waves

Unit 2 – Practical Scientific Procedures and Techniques

Learners will be introduced to the quantitative laboratory techniques; titration, calorimetry, colourimetry and laboratory safety.

Year 13

Unit 3 – Scientific Techniques

Learners will cover the stages involved and the skills required in planning and executing a scientific investigation; how to record, interpret, draw scientific conclusions and evaluate.

Unit 8 – Physiology of Human Body Systems

Learners will focus on the physiological make-up of three major body systems (musculoskeletal, digestive and lymphatic systems), how the systems function and what occurs during dysfunction.



Key Information

Exam Board	Pearson BTEC
Qualification Type	Level 3
Entry Requirements	Applied BTEC Pathway: GCSE Level 4 in Maths and a Science
Head of Department	Miss Simpson

Assessment Outline

The course is the equivalent in size to one A Level. It consists of four units, of which three are mandatory. The mandatory content accounts for 83% of the course and the external assessment will contribute 58%. In addition to external assessment, you will be required to submit several coursework assignments

Unit 1 – External Examination

Three exams will be sat, each lasting 40 minutes. These will cover the Unit 1 Biology, Chemistry and Physics content.

Unit 2 – Written Coursework

You will produce a lab report on your investigations to include a write-up on a variety of quantitative techniques (titration, colourimetry, calorimetry)

Unit 3 – External Examination

A three-hour supervised assessment which is made up of 2 parts; a practical investigation and an associated written paper.

Unit 8 – Written Coursework

You will produce a piece of coursework detailing the structure and function of the musculoskeletal, lymphatic and digestive systems.



Careers and next steps

Studying the BTEC Level 3 Extended Certificate in Applied Science will demonstrate to future employers and universities that you have a logical, analytical and creative mind. There are many links between the sciences and other subjects, such as business and maths, which will make you a suitable candidate for further education courses.

The BTEC Applied Science course provides you with an excellent foundation to go on to study at university in a wide variety of subjects such as nursing, radiography, computing and business. The techniques that you will be able to demonstrate competency in will be beneficial if you are applying to courses which involve a large amount of practical or laboratory-based work, and particularly those within a scientific field of study.