



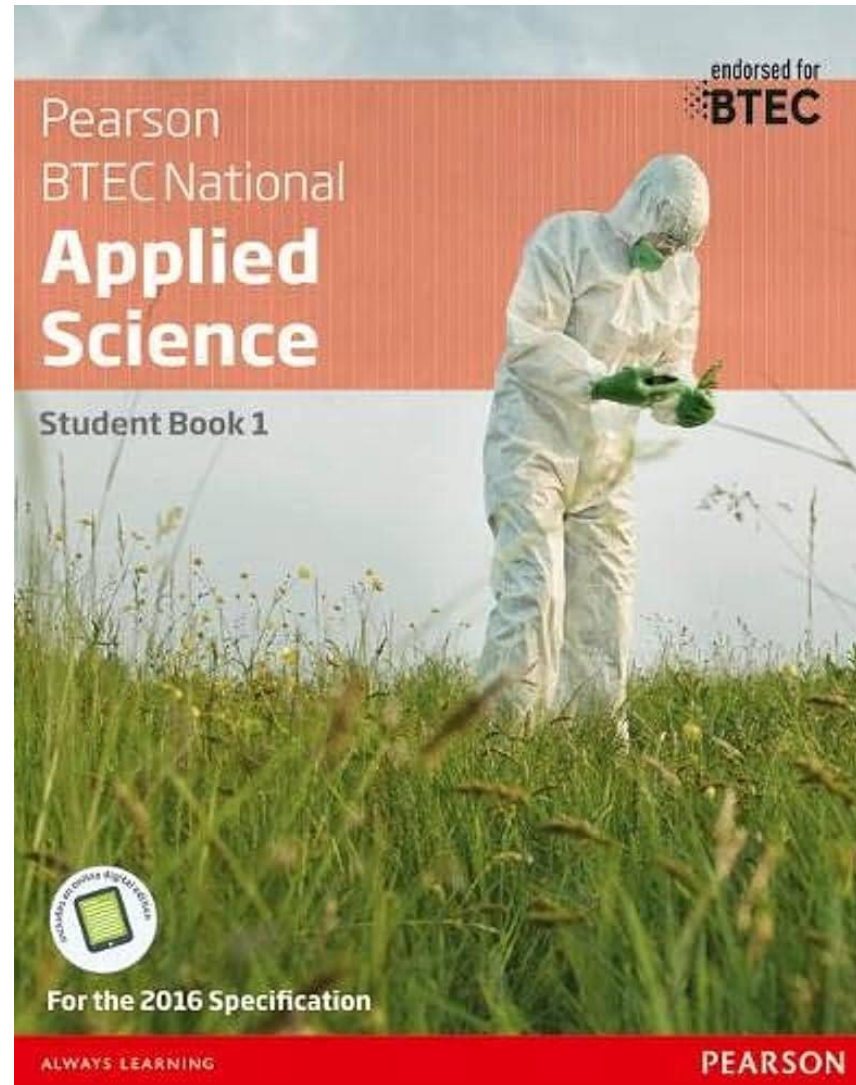
BTEC National Extended Certificate in Applied Science

2024-25

What is Applied Science?

- ▶ An Extended Certificate.
- ▶ Equivalent to one full A-Level.
- ▶ Exam board: Pearson

- ▶ D* - 56 UCAS Points
- ▶ D - 48 UCAS Points
- ▶ M - 32 UCAS Points
- ▶ P - 16 UCAS Points



What Careers Can Applied Science Lead Into?

- ▶ Forensic Science
 - ▶ Biomedical Science
 - ▶ Microbiology
 - ▶ Nursing
 - ▶ Midwifery
 - ▶ Paramedic Science
 - ▶ Pharmaceutical Science
 - ▶ Radiography
 - ▶ Engineering
- ▶ The course is also a useful foundation for laboratory work and industrial science or if you would like to continue on to Higher Education.



Why Should I study Applied Science?

- ▶ Study all three Sciences rather than specialising in one - good if you want to progress to a career that requires a good knowledge of multiple Sciences, or if you are interested in multiple Sciences but don't want to take three Science A-Levels.
- ▶ Study Sciences from a practical perspective - not just learning theory but testing ideas out in practical work and reporting on it.
- ▶ Build up your grade through a combination of coursework and examination throughout the course - don't wait to be examined at the end of Year 13 but earn your grade more gradually, helping you to be more in control of your own success.



How Will I be Assessed in Applied Science?

- ▶ Unit 1 - Examination. 25% of your overall grade.
- ▶ Unit 2 - Coursework. 25% of your overall grade.
- ▶ Unit 3 - Examination. 33% of your overall grade.
- ▶ Unit 12 - Coursework. 17% of your overall grade.



Unit 1 - Principles & Applications of Science

- ▶ Chemistry - Structure and bonding in applications of Science, Production and uses of substances in relation to properties.
- ▶ Biology - Cell structure and function, Cell specialization, Tissue structure and function.
- ▶ Physics - Working with waves, Waves in Communication, Use of electromagnetic waves in communication.



BIOLOGY



CHEMISTRY

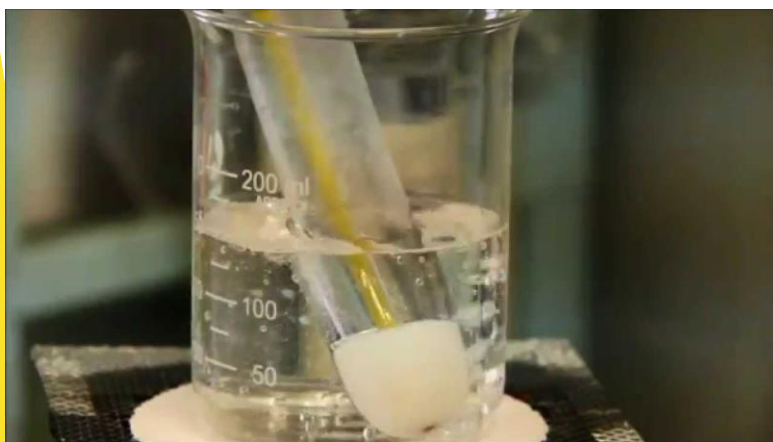


PHYSICS



Unit 2 - Practical Scientific Procedures and Techniques

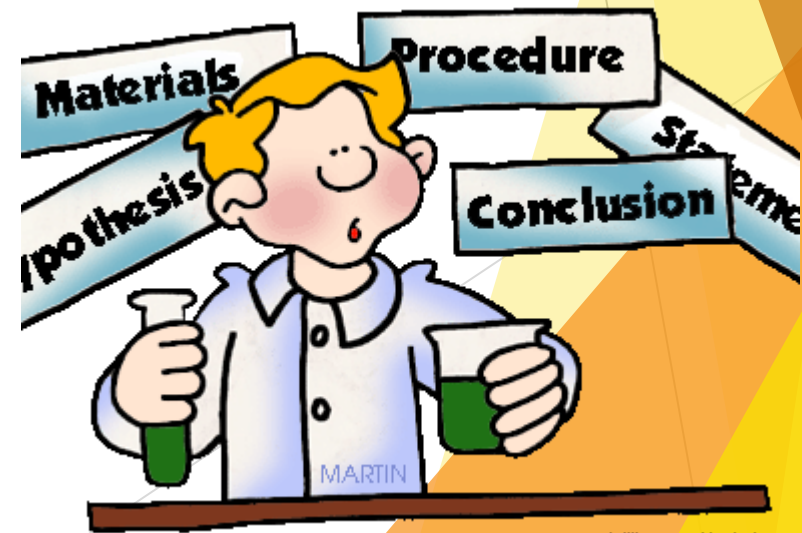
- ▶ Assignment 1 - Undertake titration and colorimetry to determine the concentration of solutions.
- ▶ Assignment 2 - Undertake calorimetry to study cooling curves.
- ▶ Assignment 3 - Undertake chromatographic techniques to identify components in mixtures.
- ▶ Assignment 4 - Review personal development of scientific skills for laboratory work.



Unit 3 - Science Investigation Skills

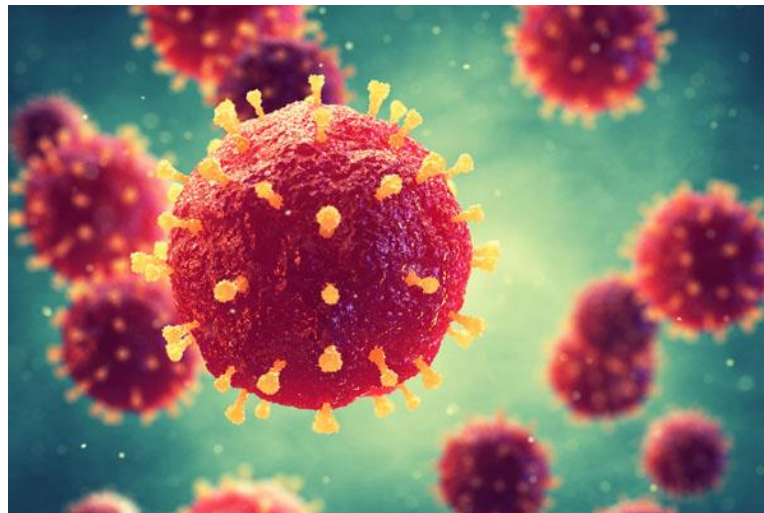
- ▶ Planning a Scientific Investigation.
- ▶ Data Collection, processing and analysis/ interpretation.
- ▶ Drawing conclusions and evaluation.

- ▶ Biology - Enzymes in action, Diffusion of molecules, Plants and their environment.
- ▶ Chemistry - Energy content of fuels.
- ▶ Physics - Electrical circuits.



Unit 12 - Diseases and Infection

- ▶ Assignment 1 - Investigate different types of diseases and infections that can affect humans.
- ▶ Assignment 2 - Examine the transmission of infectious diseases and how this can be prevented.
- ▶ Assignment 3 - Understand how infectious diseases can be treated and managed.
- ▶ Assignment 4 - Understand how the human body responds to diseases and infections.



2023 Results

100% pass rate (3 students)

All students achieved merits

2024 Results

100% pass rate (9 Students)

3 Distinctions

5 Merits

1 Pass



What are the Entry Requirements for Applied Science?

- ▶ **Course entry requirements:**
 - 5,5 in Combined Sciences
 - A minimum of a grade 4 in English and Mathematics

