

Pearson Level 3 Alternative Academic Qualification BTEC National in Applied Science



Features of the Course:

- Principles and Applications of Biology (Externally assessed)
- Principles and Applications of Chemistry (Externally assessed)
- Principles and Applications of Physics (Externally assessed)
- Practical Scientific Procedures and Techniques (Internally assessed)
- Science investigation Skills (Internally assessed)

Externally Assessed Units

Unit 1: Principles and Applications of Biology

Cells and tissues
Biological Tissues
Function of water, carbohydrates, proteins, nucleic acids and lipids
Cells, enzymes and homeostasis

Unit 2: Principles and Applications of Chemistry

Atomic and electronic structure
Bonding
Periodicity
Physical chemistry
Organic chemistry

Unit 3: Principles and Applications of Physics

Working with waves
Principles of optical fibres
Uses of electromagnetic waves in communication
Laws of motion
Electrical circuits

Assessed through three 50-mark, 1-hour exams and make up 50% of the grade

Internally Assessed Units

Unit 4: Practical Scientific Procedures and Techniques

Laboratory equipment and calibration
Preparation and standardisation of solutions
Purity of organic compounds
Colorimetry
Plant growth
Thermal energy
Electrical circuits

Unit 5: Science investigation Skills

Literature review
Investigative project proposal
Project planning
Health, safety and ethics
Experimental procedures
Scientific evaluation

Assessed through an internally assessed assignment and make up 50% of the grade

Methods of Assessment:

- 50% of the whole course is externally assessed by exams (Principles and Applications)
- 50% of the whole course assessed internally by your teachers through completion of assignments (Practical Scientific procedures and Science Investigation skills)