

# Sixth Form



## Level 3 Certificate in Applied Science

### Duration:

1 Year for Certificate, 2 years for Extended Certificate. 2 examined units and 1 coursework unit make up the Level 3 certificate. A further examined unit and 2 coursework units are required for the Extended Certificate.

### Specification:

AQA. Further details are available from their [website](#).

### Entry Requirements/Student Suitability:

Students are required to reach the Wadebridge Sixth Form Level 3 entry criteria. Students are required to have a grade C or above in any Science GCSE.

As the Applied Science has a significant coursework element, students must have the motivation and organisation to work independently on research based tasks.

### Course Content:

#### L3 certificate

##### Unit 1: Key Concepts in Science

Cell structure; Transport mechanisms; The heart; Homeostasis; Breathing & cellular respiration; Photosynthesis & food chain productivity; Atomic Structure; The Periodic Table; Amount of substance; Bonding and structure; Enthalpy changes; Useful energy & efficiency; Electricity & circuits; Dynamics

Assessed by external exam: 33.3%

##### Unit 2: Applied Experimental Techniques

Produce 6 scientific reports:

Biology:

- Rate of respiration
- Light-dependent reaction in photosynthesis

Chemistry:

- Volumetric analysis (titrations)
- Colorimetric analysis

Physics:

- Resistivity
- Specific heat capacity

Assessed by portfolio: 33.3%

##### Unit 3: Science in the Modern World

Use information about topical scientific issues obtained from a variety of media sources; Understand the public perception of science & the influence that the media have; Understand the ethical, moral, commercial, environmental, political & social issues involved in scientific advances and how these are represented in the media; Understand the roles and responsibilities that science personnel carry out in the science industry.

Assessed by external exam with pre-release material: 33.3%

### L3 Extended Certificate

#### Unit 4: Human Body

Circulatory System; Respiration and the Respiratory System; Healthy diet and personal fitness; Digestive System.

Assessed by external exam: 33.3%

For further information and exemplar question papers see the exam board [website](#).

#### Unit 5: Investigating Science

Extended practical investigation or project chosen by Student. Report on project and research.

Assessed by portfolio: 33.3%

#### Unit 6: Microbiology

Study the main groups of microorganisms in terms of their structure and function; Carry out a practical investigation into factors affecting the growth of microorganisms; Research the use of microorganisms in biotechnological industries.

Assessed by portfolio: 33.3%

### Methods of Study:

- Class discussion
- Practical activities
- Group work on e.g. presentations
- Independent research
- Practice exam questions

### Independent Study Time:

An Applied Science student should have an interest in how science is used in the 'real world'. They need to be able to organise their independent study time to ensure that coursework is thorough and completed on time. Homework tasks may include practice exam questions or research of specific elements of the specification.

### Progression and the Future:

This qualification is supported by a range of universities, and taken alongside other qualifications it can fulfil the entry requirements for a number of science-related higher education courses, including biomedical, forensic and sports science, as well as nursing. The qualification also offers learners an opportunity to develop transferable skills such as problem solving, research and communication as part of their applied learning.

### Subject Contacts:

Miss Coombes:

[mcoombes@wadebridge.cornwall.sch.uk](mailto:mcoombes@wadebridge.cornwall.sch.uk)

### How to Apply:

The Application Process begins in February of each year. Please contact Sarah Fisher, Sixth Form Administrator for further information or to request an application form.

[sixthform@wadebridge.cornwall.sch.uk](mailto:sixthform@wadebridge.cornwall.sch.uk)

For further information and to apply for this course:

Please contact Sarah Fisher, Sixth Form Administrator

[sixthform@wadebridge.cornwall.sch.uk](mailto:sixthform@wadebridge.cornwall.sch.uk)

Telephone 01208 893905

