**BIOLOGY NATIONAL 4**

**CONTENT**

The Course has 3 mandatory units and an added value unit:

**Cell Biology**

The key areas covered are: cell division and its role in growth and repair, DNA, genes and chromosomes, therapeutic use of cells, properties of enzymes and use in industries, properties of microorganisms and use in industries, photosynthesis – limiting factors, factors affecting respiration, and controversial biological procedures.

**Multicellular Organisms**

The key areas covered are: sexual and asexual reproduction and their importance for survival of species, propagating and growing plants, commercial use of plants, genetic information, growth and development of different organisms, and biological actions in response to internal and external changes to maintain stable body conditions.

**Life on Earth**

The key areas covered are how animal and plants species depend on each other, impact of population growth and natural hazards on biodiversity, nitrogen cycle, fertiliser design and environmental impact of fertilisers, adaptations for survival, and learned behaviour in response to stimuli linked to species survival.

**Added Value Unit: Biology Assignment**

Learners will draw on and extend the skills they have learned from across the other Units, and demonstrate the breadth of knowledge and skills acquired, in unfamiliar contexts and/or integrated ways.

**ASSESSMENT**

To pass National 4 Biology candidates must pass all of the mandatory units and the added value unit mentioned above.

There is no external exam for National 4 Biology.

**HOMEWORK**

Homework will vary depending on the units being covered. There is an expectation that students will go over their class work regularly to consolidate learning. Preparation for assessments will also form part of the homework for the course.

**ENTRY REQUIREMENTS**

* Completed the S3 Specialism in Biology
* By negotiation with the department