Curricular Area: Science Course Title: Biology National 4

Course Description

This course is intended for students who have not studied Biology before and have done National 4 Chemistry or National 4 Physics in S4.

The course develops an understanding of the importance of biological issues

facing the individual and society.

There are 3 units of study:

- Cell Biology
- Multicellular Organisms
- Life on Earth

The course is designed to give students an understanding of themselves and the natural world that they live in. Students will study the Biology that happens inside cells and whole organisms; including micro-organisms, plants and animals. Great advances in knowledge of how living things work have been made in recent years, and the course also reflects more modern areas of Biology such as Molecular Biology and controversial uses of Biology.

The course involve practical work carried out both in the laboratory and in the environment.

Entry requirements

There is no formal entry requirement.

Assessment

At National 4 level students are assessed on their ability to make accurate statements, related to key areas of content and successfully perform solving problem skills, (in Key Area assessments), as well as their ability to plan, carry out and write up a practical investigation. Students will be applying skills of scientific enquiry throughout the course. During the Added Value Unit students will carry out an in-depth investigation or piece of research into an unfamiliar area of Biology and then present their findings.

Home Study Expectations

Students are issued with home study either weekly or fortnightly depending on the demands of the part of the course being studied. Home Study tasks will vary and could include research, consolidation of learning and writing up experiments. Students will be also be expected to spend 20 minutes each week reading over their notes.

Possible next level of study

National 4
Biology

National 4
Chemistry or Physics

National 5 Biology or
National 5 Laboratory Science

Wider Achievement Opportunities

Students have many opportunities to explore and develop their investigative and practical skills in Biology. There are also opportunities to be involved in debates about contemporary controversial biological issues.

Possible career paths

The study of Biology at this level is a good stepping stone to other Science courses at school or college.

Sport and exercise careers, research in laboratories or the natural environment, health care, food related careers, environmental management and conservation, education, biotechnology, forensic science, Science advisors for politics and policy makers, consultants on economic impact of biological issues, Science writing and communication, art: illustrations in Biology textbooks, magazines and many more.

For more information see https://www.societyofbiology.org/careers-and-cpd/careers/make-a-difference