Curricular Area: Science

Course Description

The course is suitable for students who wish to continue to study Biology beyond Higher level and is an ideal introduction to University level study.

A high degree of commitment, self-motivation and determination are essential. Students will be expected to work independently and consequently this course is a stepping stone to the type of studying students will experience at University.

The course consists of 3 units of work.

Unit 1: Cells and Proteins: laboratory techniques for Biologists, proteins **Unit 2: Organisation and Evolution:** field techniques for Biologists, organisms

Unit 3: Investigative Biology: scientific



principles and process, experimentation, critical evaluation of biological research **Biology Investigation:** more detail on this in the assessment section

Entry requirements

Higher Human Biology at Grade B or above

Assessment

At Advanced Higher 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 an experiment/practical investigation.

There is a Biology investigation, which allows students to carry out an in-depth study of a biology topic. This is an individual open-ended task, which may involve a significant part of the work being carried out without close supervision. The learner will extend and apply the skills of independent/autonomous working. This includes making independent and rational decisions based on evidence and interpretation of scientific information and the analysis and evaluation of their results. This will further develop and enhance their scientific literacy. The investigation will have 30 marks.

There will also be a prelim exam and an externally assessed question paper.

Home Study Expectations

Students are issued with home study every week. Home Study tasks will vary and could include research, consolidation of learning, practicing data handling skills or extended pieces of writing. Students will be expected to enhance and extend their knowledge in serious private study, especially when they are working on their own investigation.

Wider Achievement Opportunities

Students have many opportunities to explore and develop their investigative and practical skills in Biology. The ability to write extended pieces of text to express scientific ideas and knowledge are also developed.

Possible career path

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 <u>https://www.societyofbiology.org/careers-and-cpd/careers/make-a-difference</u>