

# CAREERS INFORMATION



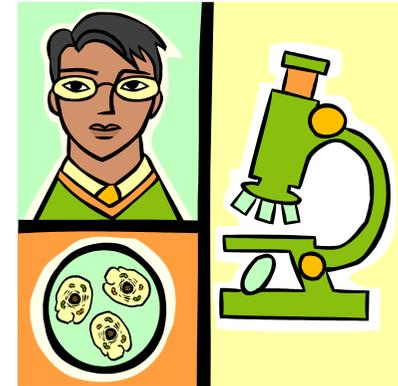
# OTHER INFORMATION

**STAFF:** Mr Russell, Mr Stickle, Miss Barnard

Field work is an integral part of the course

# Science

# Biology National 5



## Career Areas

- [Animals, Land and Environment](#)
- [Hairdressing & Beauty / Beauty](#)
- [Health and Medicine](#)
- [Manufacturing Industries](#)
- [Science and Mathematics / Biology / Food Science & Technology](#)

Further advice and information on these options is available from your subject teacher, guidance teacher and careers adviser.



TURRIFF ACADEMY

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# COURSE INFORMATION

## Why Biology?

Biology – the study of living organisms – affects us all. You will find out how Biology is helping to find solutions to world problems. Advances in technology mean biologists are exploring the use of genetic modification to produce new plants and drugs, solving crimes by understanding crime scene material, and developing new sources of food for our growing population.

There are many career opportunities connected with biology, including medicine, veterinary work, nursing, dentistry, physiotherapy, food science, sport science, pharmacology and beauty therapy.

## Course Outline

Biology is a hands-on subject that develops your analytical thinking, and helps you to solve problems through experiments and research. You will learn about living systems and their interdependence. You will find out about evolution of species, and how humans impact on the environment. You will develop your practical and investigation skills by carrying out biological experiments in laboratories.

The course has three compulsory units, plus an added value unit that assesses your practical skills. The units are the same as those for National 4 but you will have to achieve a higher standard of work.

### Cell Biology

In this unit you will:

- develop your skills of scientific enquiry by studying: cell structure; transport across cell membranes; producing new cells; DNA and the production of proteins; proteins and enzymes; genetic engineering; photosynthesis and respiration.

### Biology: Multicellular Organisms

In this unit you will:

- studying cells, tissues and organs, stem cells and meristems
- develop an understanding of control and communication, reproduction, variation and inheritance;
- learn to understand the need for transport and effects of lifestyle choices on animal transport and exchange systems.

### Biology: Life on Earth

In this unit you will:

- develop your investigation and analytical thinking skills by studying biodiversity and the distribution of life and energy in ecosystems;
- use sampling techniques and measurement of abiotic and biotic factors.

### Added Value Unit: Biology Assessment

In this unit you will:

- carry out an investigation on a biological topic, drawing on the skills you have learned from the other units and present your findings in an assignment. This will be marked by the SQA

# ASSESSMENT

Your work will be assessed by your teacher on an on-going basis throughout the course. Items of work might include:

- practical work - such as experiments
- written work - research assignments and lab reports
- class-based exams.

You will also sit a written exam marked by the SQA. You must pass all the course units and the written exam (including the assignment) to be awarded the qualification.

The Course assessment is graded A–D. Your grade will depend on the total mark for all the units in your course

# PROGRESSION

Successful completion of this course may lead to:

- Higher Biology

## FURTHER COURSES IN TURRIFF ACADEMY

In S5/6:

[Biology Higher](#)

[Biology Advanced Higher](#)

