

Overview

There are four main areas of study in this course:

- Living Organisms and Life Processes
- Body Systems
- Genetics
- Micro-Organisms & Health

Many topics in this course develop the ideas and concepts studied during Years 8 – 10.

Topical issues addressed include:

- Pollution, global warming, recycling
- Genetic engineering, embryo transplants, stem cells in medicine
- Diet, fitness, drugs and disease.

Experimental work is likely to involve enzymes, food tests, heart and kidney dissections and fieldwork. NB: You cannot choose Biology and Single Award Science.

Unit	Content	Assessment
1. Cells, Living Processes & Biodiversity	This unit deals with cells, photosynthesis and plants, nutrition and health, enzymes and digestion, breathing and the respiratory system, nervous system and hormones, and ecological relationships and energy flow.	35% of Final Grade Written Examination – End of Year 11
2. Body Systems, Genetics, Micro-Organisms and Health	This unit deals with osmosis and plant transport, genome, DNA and genetics, reproduction, contraception and fertility, applied genetics, variation and natural selection, the circulatory system, health, disease and defence mechanisms	40% of Final Grade Written Examination – End of Year 12
3. Practical Skills	The following skills are assessed: <ul style="list-style-type: none"> • Planning and carrying out an investigation. • Analysing experimental data. • Drawing conclusions from an experiment. 	25% of Final Grade 2 Practicals Written Examination

Careers

Biochemist, Biology Teacher, Botanist, Dietician, Optometrist, Doctor, Ecologist, Environmental Health Officer, Environmental Scientist, Health Care Assistant, Careers in Horticulture, Laboratory Technician, Landscape Architect, Marine Biologist, Microbiologist, Careers in the Ambulance Service, Nutritionist, Pathologist, Pharmacist, Physiotherapist, Radiographer, Veterinary Nurse, Veterinary Surgeon, Zoo Keeper, Zoologist, Biotechnologist, Beauty Therapist, Nurse, Careers in Forestry, Careers in Agriculture and Oceanography.