# Programme of Study

Subject: Biology (Exam board AQA)

Year: 10 (Triple and Trilogy)



#### Autumn 1

- Communicable Disease
- Viral Diseases
- Fungal and Protist Diseases
- Bacterial Diseases and Preventing Disease
- Fighting Disease Vaccination, drugs
- Developing drugs
- Monoclonal antibodies (triple only)
- Required practical: Culturing Microorganisms (triple only)

#### Autumn 2

- Photosynthesis
- How plants use Glucose
- The rate of Photosynthesis
- Required practical: Investigating the rate of Photosynthesis
- Aerobic respiration
- Anaerobic respiration
- Metabolism

## **Spring 1**

- The Nervous system, synapses and reflexes
- Required Practical: Investigating Reaction Time
- The Brain and Eye (triple only)
- Controlling Body temperature (triple only)
- Hormones and controlling Blood glucose
- Controlling water content and Kidney failure(triple only)

## Spring 2

- Puberty and Menstrual Cycle
- Contraceptives and Increasing fertility
- Thyroxine and Adrenaline
- Plant Hormones(triple only)
- Uses of plant hormones
- Required Practical: Investigating Plant growth responses (triple)

#### Summer 1

- Types of Reproduction
- The structure of DNA
- Meiosis
- Protein synthesis and Mutations (triple only)
- Alleles, Chromosomes and genetic diagrams
- Inherited disorders
- The work of Mendel (triple only)

## Summer 2

Variation, Evolution and extinction Ideas about evolution (triple) Selective breeding Genetic Engineering Fossils Antibiotic resistant Bacteria Classification Cloning and Speciation (triple)