

Biology

Year 7

Cells, Organs and Systems: microscopy, animal and plant cells, organisation, organ damage and repair.

Reproduction: the human reproductive system, reproduction in plants.

Organisms and the environment: classification, feeding relationships, sampling.

Year 8

Adaptations and Evolution: adaptations, evolution, natural selection.

Food and the Digestive System: diet, the digestive system, enzymes, food production.

Supplying the Cell: respiration, the circulatory system, the respiratory system, the skeleton, muscle action.

Health and Disease: microorganisms, pathogens, disease, the immune system, preventing and treating disease.

Genes and Variation: variation, inheritance, selective breeding, genetic engineering.

Year 9

Cell Biology: microscopy, eukaryotic and prokaryotic cell structures, cell differentiation, mitosis and the cell cycle, stem cells, diffusion, active transport, exchange surfaces, osmosis.

Organisation: organisation, food tests and digestion, enzymes, plant tissues and structures, transpiration, respiratory system, blood and the circulatory system, the heart, non-communicable disease.

Infection and response: communicable disease.

GCSE AQA - 8461

Year 10

Infection and response: immunity, prevention and treatment of disease.

Bioenergetics: photosynthesis, aerobic and anaerobic respiration, exercise.

Ecology: feeding relationships, cycles, decay, human impact on the planet, biodiversity, food production, sampling.

Homeostasis and response: the nervous system, the eye and the brain, homeostasis, the hormonal system.

Year 11

Homeostasis and response: the hormonal system, plant tropisms, the kidney.

Inheritance, Variation and Evolution: sexual and asexual reproduction, meiosis, DNA and protein synthesis, genetic crosses, variation, evolution and natural selection, selective breeding, genetic engineering, cloning.

A-Level OCR - H420

Year 12

Teacher 1: practical skills, microscopy, biological molecules, nucleic acids and protein synthesis, enzymes, membranes and transport, cellular diversity and organisation, cell cycle and cell division, communicable disease, energy for biological processes.

Teacher 2: exchange surfaces and breathing, animal transport systems, plant transport systems, classification, evolution, biodiversity, practical skills.

Year 13

Teacher 1: respiration, respiration investigation, genetics of living systems, patterns of inheritance and variation, manipulating genomes, cloning and biotechnology.

Teacher 2: neuronal communication, hormonal communication, communication and homeostasis, plant responses, ecosystems, populations and sustainability.