A level Biology KS5 Overview 2020-21

KS5 – AQA Biology A level 7401/7402

Website for in depth subject content: <https://www.aqa.org.uk/subjects/science/as-and-a-level/biology-7401-7402>

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|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| Year 12 | **Biological molecules**  Carbohydrates, Lipids, Proteins and Nucleic acids  Required practical *Investigating enzyme activity*  **Cells**  Microscopes, cell organelles and cell division  Required practical *Observing mitosis in onion cells* | **Biological molecules**  Carbohydrates, Lipids, Proteins and Nucleic acids  **Cells**  Transport across membranes and immunity  Required practical *Investigating osmosis* | **Exchange of substances**  Gas exchange in insects, mammals, leaves and fish  **Genetics and Variation**  Genes and protein synthesis  Required practical *Investigating leakage across membranes* | **Mass Transport** Digestion, cardiovascular system and transport in plants  Required practical *Heart dissection*  **Genetics and Variation**  Biodiversity  Required practical *Growing bacteria* | Catch up and review  Exam preparation | Exam preparation  End of year exams |

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|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| Year 13 | **Energy Transfer**  Photosynthesis, Respiration and Energy flow in ecosystems  Required practical *Investigating yeast and respiration*  **Organisms response to environment**  Nervous system, muscles and homeostasis  Required practical *Investigating response to stimuli* | **Energy Transfer**  Photosynthesis, Respiration and Energy flow in ecosystems  Required practical *Investigating plant pigments*    **Organisms response to environment**  Nervous system, muscles and homeostasis | **Genetics and Populations** Dihybrid crosses, populations and ecosystems  **Gene expression**  Gene expression, recombinant DNA and genetic fingerprinting | **Genetics and Populations** Dihybrid crosses, populations and ecosystems  Required practical *Investigating plant pigments*  **Gene expression**  Gene expression, recombinant DNA and genetic fingerprinting  Required practical *Investigating the impact of an abiotic factor* | Catch up and review  Exam preparation | Exam preparation  Final exams |