Biology

Year 13

William Hulme's Grammar School
The best in everyone™
Part of United Learning

Overview	Students will complete the study the A2 content of the AQA Biology specification. Students will be taught by two teachers that cover half of the specification each. This simultaneous teaching enables depth and breadth of curriculum coverage. They will build on their GCSE knowledge and Y12 learning, and complex theory of biochemistry to the life processes of respiration, photosynthesis, response to stimuli & nervous co-ordination, inheritance, evolution, gene expression and homeostasis. They will continue to develop their practical skills by completing more complex investigative work. The 6 remaining assessed practicals will take place this year. All work, whether theoretical or practical, is designed to prepare students for the next stage of their life, whether that be further academic study or work, and to enable them to become informed citizens that can make positive contributions to society.

Autumn Term	**Assessment**
Units Studied: ■ Respiration ■ Photosynthesis ■ Response to stimuli ■ Inheritance ■ Nervous co-ordination ■ Populations and ecosystems	■ Mini tests covering short term recall and application of knowledge questions with immediate feedback. ■ Synoptic tests covering multiple units and longer-term recall, teacher assessed, with feedback and self-reflection activities. ■ **Mock exam** (December): two papers plus synoptic essay Practical Assessments: CP7: Thin layer chromatography CP8: Dehydrogenase activity CP9: Respiration

Spring Term	**Assessment**
Units studied: ■ Gene expression ■ Homeostasis ■ Recombinant DNA	■ Mini tests covering short term recall and application of knowledge questions with immediate feedback. ■ Synoptic tests covering multiple units and longer-term recall, teacher assessed, with feedback and self-reflection activities. ■ **Mock exam** (February): two papers plus synoptic essay Practical assessments: CP10: Taxes and kinesis CP11: Series dilution & calibration curves CP12: Quadrat sampling

Summer Term	**Assessment**
Final exam preparation. Revision lessons covering the following: ■ Core knowledge review ■ How to answer practical questions ■ Synoptic essay practice (25 marks) ■ Maths in biology ■ Statistical tests ■ Evaluation of data ■ Comprehension style questions ■ Synoptic long response	

Useful Resources for Supporting Your Child at Home:	Homework:
■ Revision study plan provided by WHGS ■ CGP revision guides **Online resources subscribed to by WHGS or the department:** ■ UpLearn ■ Seneca ■ Carousel **Other recommended online resources** ■ **https://missestruch.co.uk/** ■ **https://www.savemyexams.com/a-level/#aqa** ■ **https://www.physicsandmathstutor.com/biology-revision/a-level-aqa/** ■ **www.khanacademy.org** **Reading beyond the spec** https://www.nature.com/ https://www.nationalgeographic.co.uk/ https://www.newscientist.com/ https://www.ted.com/talks https://www.sciencemag.org/podcasts https://www.thenakedscientists.com/science-podcasts	Each unit of work has a homework booklet with a selection of past exam questions. A mark scheme is also provided. Students are expected to work through this booklet independently answering, self-assessing and reflecting, throughout the period that the unit is being studied. Completion of this is checked by the class teacher at the end of the unit.