## Subject: Biology

## Year 13



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 ill 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.

|             | <ul> <li>Units Studied:</li> <li>Respiration</li> <li>Photosynthesis</li> <li>Response to stimuli</li> <li>Inheritance</li> <li>Nervous co-ordination</li> <li>Populations and ecosystems</li> </ul> | Assessment   |  |
|-------------|--|--|--|
| Autumn Term |  | <ul> <li>A range of:</li> <li>mini-tests covering short term recall.</li> <li>Synoptic tests covering multiple units and longer term recall.</li> <li>Practical Assessments:</li> <li>CP7: Thin layer chromatography</li> <li>CP8: Dehydrogenase activity</li> <li>CP9: Respiration</li> </ul> |  |
|             | Units studied:   |  |  |
|             | Units studied:   | Assossment   |  |
| Spring Term | <ul> <li>Units studied:</li> <li>Gene expression</li> <li>Homeostasis</li> <li>Recombinant DNA</li> </ul>  | Assessment Mock exam: Two papers plus synoptic essay (February) mini-tests covering short term recall. Synoptic tests covering multiple units and longer term recall. Practical assessments: CP10: Taxes and kinesis CP11: Series dilution & calibration curves CP12: Quadrat sampling         |  |

|          | Fina | al exam preparation. Revision lessons | Assessment |
|----------|------|---------------------------------------|------------|
|          | cov  | ering the following:                  |            |
| 5        |      | Core knowledge review                 |            |
| err      |      | How to answer practical questions     |            |
| Summer T |      | 25 mark synoptic essay practice       |            |
|          |      | 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<br>CGP revision guides | Each unit of work has a homework booklet with a selection of past exam questions. A mark scheme  |
| <ul> <li>Online resources subscribe to by WHGS or the department:</li> <li>Seneca</li> <li>Carousel</li> </ul> |   | is also provided. Students are expected to work<br>through this booklet independently answering,<br>self assessing and reflecting, throughout the time<br>period that the unit is being studied. |

| Useful Resources for Supporting Your Child at Home:      | Homework:  |
|--|--|
| Other recommended online resources                       | Completion of this is checked by the class teacher |
| https://missestruch.co.uk/                               | at the end of the unit.                            |
| 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      |  |