



## Curriculum Overview

At ICC we follow the AQA Biology AS and A-level Specification. The curriculum is sequenced to be delivered by two members of teaching staff and each unit is mapped to the big ideas from our KS3 and KS4 curriculum. Each unit is assessed with end of topic summative assessments as well as half termly cumulative assessments and formative assessment throughout the course ensures retrieval of relevant content and supports students in making synoptic links. Opportunities to consider rich questions and reference to futures are made where relevant throughout the course in order to help our students understand the present and plan for their own future.

[Link to the specification](#)

[Link to the scheme of work](#)

|             |             | Teacher 1  |  |               | Teacher 2   |                       |                         |
|-------------|-------------|--|--|---------------|---|-----------------------|-------------------------|
|             |             | Topics   | Practical's                                  | Big idea      | Topics  | Practical's           | Big idea                |
| Autumn Term | First half  | 3.5.1 Photosynthesis<br>3.5.2 Respiration  | Required practical 7<br>Required practical 8 | <br>ECOSYSTEM | 3.7.1 Inheritance<br>3.7.2 Populations  |                       | <br>GENES               |
|             | Second half | 3.5.2 Respiration<br>3.5.4 Nutrient cycles   | Required practical 9                         | <br>ECOSYSTEM | 3.7.3 Evolution may lead to speciation<br>3.7.4 Populations in ecosystems   | Required practical 12 | <br><br>GENES ECOSYSTEM |
| Spring Term | First half  | 3.6.1 Stimuli, both internal and external are detected and lead to a response<br>3.6.2 Nervous coordination. | Required practical 10                        | <br>ORGANISMS | 3.8.1 Alteration of the sequence of bases in DNA can alter the structure of proteins.<br>3.8.2 Gene expression is controlled by a number of features. |                       | <br>GENES               |
|             | Second half | 3.6.3 Skeletal muscles are stimulated to contract by nerves and act as effectors                             |  | <br>ORGANISMS | 3.8.3 Using genome projects<br>3.8.4 Gene technologies  |                       | <br>GENES               |
| Summer Term | First half  | 3.6.4 Homeostasis is the maintenance of a stable internal environment<br>Revision                            | Required practical 11                        | <br>ORGANISMS | Revision  |                       |                         |
|             | Second half | Revision   |  |               |   |                       |                         |