# IB Biology

## HIGHER AND STANDARD LEVEL

## *What are the aims of the course?*

Students will:

- Develop essential knowledge and understanding of different areas of Biology and how they relate to each other
- Develop and demonstrate a deeper appreciation of the skills, knowledge and understanding of how science works
- Develop interest in and enthusiasm for Biology, including developing an interest in further study and careers in Biology
- Appreciate how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society

## *What does it involve?*

**Core Modules (SL and HL)**
These include: Cell Biology; Molecular Biology; Genetics; Ecology; Evolution and Biodiversity; Human Physiology

**Additional Higher Level Modules (HL)**
These include: Nucleic Acids; Metabolism; Cell Respiration and Photosynthesis; Plant Biology; Genetics and Evolution; Animal Physiology

**Options**
Standard level and Higher level components:
These include: Neurobiology and Behaviour; Biotechnology and Bioinformatics; Ecology and Conservation; Human Physiology

# How is it assessed?

**Assessment SL**

- **Paper 1:** 45 minutes, 30 marks 20% weighting
  Multiple choice questions on core topics
- **Paper 2:** 1 hour 15 minutes, 50 marks 40% weighting
  Database question, short and extended response question in Section A, and one from two extended response (essay) questions in Section B – all on Core topics
- **Paper 3:** 1 hour, 35 marks 20% weighting
  Section A - experimental skills on core topics
  Section B - short/extended response questions on one option

**Assessment HL**

- **Paper 1:** 1 hour, 40 marks 20% weighting
  Multiple choice questions on core and Higher Level topics
- **Paper 2:** 2 hours 15 minutes, 72 marks 36% weighting
  Data based question, short and extended response question in Section A, and one from two extended response (essay) questions in Section B on Core and Higher Level topics
- **Paper 3**: 1 hour 15 minutes 35 marks 20% weighting
  Section A - experimental skills on core and Higher Level topics
  Section B - short/extended response questions on one option

**Experimental /Practical Work**

- **Non-assessed** - 10 hours Group 4 project.
  20 hours Standard Level/40 hours Higher Level practical work, to include practicals 1-7 in the specification
- **Assessed** - Individual Investigation
  10 hours weighting 20%
  Criteria Personal engagement 8%
  Exploration 25%
  Analysis 25%
  Evaluation 25%
  Communication 17%

# Are there any specific entry requirements?

While there are no specific entry requirements, it is strongly recommended that the student has a good background in a range of Biology topics.

# Why is it a useful qualification?

Biology is a natural fit to pursuing career pathways in the science and health sectors. Students pursuing a qualification in Biology will develop skills in literacy, numeracy, problem solving and critical thinking. Biologists connect with natural, social, economic, political and technological fields, giving them insight into the ever changing world in which we live.