



Subject: Biology
Year/Course: IB Standard

Knowledge and Understanding

By the end of this course, students will have acquired a broad knowledge base on the following concepts as described in the IB Diploma curriculum; Statistical Analysis, Cells, Chemistry of Life, Genetics, Ecology and evolution, Human Health and Physiology, Nucleic acids and proteins, Cell respiration and photosynthesis

Subject Specific Skills developed

Students develop subject specific skills in the following areas;

- a) Theoretical understanding: Recall of scientific information, understanding, application of knowledge, analysis, synthesis and evaluative techniques.
- b) Practical skills; Designing experimental procedures, collecting, processing and presenting practical data, using scientific theory to offer relevant conclusions and evaluating the strengths and limitations of methods and techniques. In addition, students ability to manipulate apparatus accurately and safely is also assessed.

Transdisciplinary and Generic Skills developed

Students also develop the following trans disciplinary skills in Science.

- a) Research skills.
- b) ICT presentation skills.
- c) Extended writing skills.
- d) Attitude to learning. (This includes a number of skills from the IB learner profile including, organization, self reflection, teamwork, motivation, being inquisitive.)

Assessment

All assessments in Science are formative and involve student reflection, self evaluation and target setting.

- a) Theoretical understanding (written tests)
- b) Practical assessments.
- c) Research projects.
- d) ICT presentations.
- e) Extended writing assessments.
- f) Attitude to learning.

Challenge for All

All activities are differentiated to support, challenge and extend students of all abilities throughout this Science course.

Subject: Biology
Year/Course: IB Higher

Knowledge and Understanding

Statistical Analysis, Cells, Chemistry of Life, Genetics, Ecology and evolution, Human Health and Physiology, Nucleic acids and proteins, Cell respiration and photosynthesis, Plant science, Genetics 2, Human Health and Physiology, Option G Ecology and Conservation, Option H Further Human Physiology (HL ONLY).

Subject Specific Skills developed

Students develop subject specific skills in the following areas;

- a) Theoretical understanding: Recall of scientific information, understanding, application of knowledge, analysis, synthesis and evaluative techniques.
- b) Practical skills; Designing experimental procedures, collecting, processing and presenting practical data, using scientific theory to offer relevant conclusions and evaluating the strengths and limitations of methods and techniques. In addition, students ability to manipulate apparatus accurately and safely is also assessed.

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