

Biology IGCSE
Curriculum



Cambridge IGCSE 0970

Introduction

This document outlines the curriculum for students studying IGCSE Biology at LWSF during Years 10 and 11. The course follows the Cambridge IGCSE Biology syllabus and is designed to develop students' understanding of biological concepts and their applications. The course is designed to equip students with the knowledge and skills necessary for future academic and professional success.

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Aims

The primary goals of this course are to:

- Develop students' knowledge and understanding of biological concepts.
- Enhance students' experimental skills and ability to conduct scientific investigations.
- Foster a positive attitude towards biology and encourage enjoyment of the subject.
- Prepare students for further study in biology or related fields.
- Enable students to apply biological knowledge and skills to real-world problems.

What The Student Will Learn

Course Overview

IGCSE Biology is a comprehensive course that covers a wide range of biological topics. It is designed to provide a strong foundation for further study in biology or other subjects. The course emphasizes experimental work, problem-solving, and the ability to communicate scientific ideas effectively.



Core Topics

All students will study the following core topics:

1. **Cells:**

- Cell structure and function
- Cell division
- Transport across membranes

2. **Organisms:**

- Classification of organisms
- Chemicals of life and enzymes
- Adaptations of organisms to their environment
- Biodiversity

3. **Life Processes:**

- Nutrition
- Respiration
- Transport
- Excretion
- Growth and development
- Reproduction
- Homeostasis

4. **Plants Science:**

- Structure
- Reproduction
- Nutrition
- Transport

5. **Ecology:**

- Ecosystems
- Food webs
- Population dynamics
- Pollution and conservation

6. **Human Biology:**

- Inheritance and genetics
- Variation and Selection
- Diseases and immunity
- Drugs



Supplementary Topics

Students will have to do the following additional topics:

Human Biology:

- Human health and disease
- Excretion
- Genetics+
- Biotechnology and genetic modification

Assessment

Students will be assessed through board specific written examinations at the end of Year 11. The examinations will consist of three papers. Paper 1 will assess knowledge and understanding of the core topics in a multiple choice form, paper 2 in a theory form, while Paper 3 will focus on experimental skills and applications.

Additional Resources and Support

LWSF will provide students with a variety of resources and support to help them succeed in their IGCSE Biology studies. These may include:

- Textbook resources
- Online learning platforms
- Regular laboratory work
- Independent research and self-study
- Opportunities for additional support as necessary

Evaluation and Review

The curriculum will be reviewed annually to ensure its effectiveness and alignment with the boards' defined curriculum. Feedback from students, teachers, and parents will be considered in the review process.

Updated August 2024

Next review: August 2025