

# IB Biology HL Syllabus

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Room: 6

School: Galileo Magnet High School



## Course Description:

This two-year course develops advanced understanding of molecular biology, evolution, genetics, and physiology. Emphasis is placed on scientific inquiry, data analysis, and practical lab skills aligned with the IB curriculum. HL students complete additional content and assessments compared to SL.



## Core Topics:

- Cell Biology
- Molecular Biology
- Genetics
- Ecology
- Evolution & Biodiversity
- Human Physiology



## HL Extensions:

- Nucleic acids & metabolism
- Plant biology
- Genetics and evolution (advanced)
- Animal physiology



## Internal Assessment (IA):

Independent investigation worth 20% of final IB score. Includes research question, hypothesis, experimental design, data collection, processing, analysis, and evaluation.



### **Grading Breakdown:**

Danville Public Schools uses a three-tiered grading system:

- Gold (40%) — Unit exams, major lab reports, IA checkpoints
- Silver (35%) — Quizzes, data analysis tasks, topic reviews
- Bronze (25%) — Classwork, participation, practice questions



### **IB External Exams (Year 2):**

- Paper 1: Multiple Choice (30 mins)
- Paper 2: Data Analysis & Short Answer (2 hr 15 min)
- Paper 3: Experimental Design and Option Topic (1 hr 15 min)



### **Supplies:**

- Binder with dividers
- Colored pencils
- Graph paper
- Scientific calculator
- Metric ruler