



Course Descriptors 2020 - 2021 Semester 1

Biology
Mathayom 4



EIP Mathayom Biology Course Description First Year

Subject: Core Biology
Grade: Mathayom 4
Periods: 4

Department: Science
Course Code: SC31243
Credit: 1.5

Course Material:

Modern Biology, Holt, Rinehart and Winston

Course Description:

Since the outbreak of the COVID-19 pandemic, it has affected communities all over the world. The semester will start on educating the students on COVID-19, as it has impacted the livelihoods of the students directly.

The first semester will focus on an introduction to Life Sciences and all its components. Special attention will be paid to fundamental biological concepts and through investigative processes, the learners will become acquainted with the scientific method and the correct ways of communicating their findings. This course will also include the basic units of life starting from atoms and working up the organizational levels to modern organisms. Focus will be given to biochemical structure, cell structure and the relationship between cells and their functions. By doing course labs, projects and assignments, the learners will gain a deeper understanding of the topics studied.



EIP Mathayom Course Outline
First Semester

Unit 1:

Chapter 0 – COVID 19

- Introduction to COVID-19
- Flatten the curve and raise the line
- How to protect yourself and others

Chapter 1 – The Science of Life

- The World of Biology p 5
- Themes in Biology p 10
- The Study of Biology p 13
- Tools and Techniques p 21

Chapter 2 – Chemistry of Life

- Composition of Matter p 31
- Energy p 35
- Water and Solutions p 39

Chapter 3 – Biochemistry

- Carbon compounds p 51
- Molecules of Life p 55

Unit 2

Chapter 4 – Cell Biology

- Introduction to Cells p 72
- Cell Organelles and Features p 77
- Unique Features in Plant Cells p 87



EIP Mathayom Evaluation and Grading
First Semester

Breakdown of Grades

Criteria	1 st quarter	2 nd quarter	Total
Homework	5%	5%	10%
Participation	5%	5%	10%
Behavior	5%	5%	10%
Labs/Group Work	5%	5%	10%
Tests/Quizzes	20%	20%	40%
Final Examination		20%	20%
Total	40%	60%	100%