

# Course Descriptors 2020 - 2021 Semester 1

Biology Mathayom 5



#### EIP Mathayom Course Description Second Year

Subject: Core Biology Department: Science
Grade: Mathayom 5 Course Code: SC32243

Periods: 4 Credit: 2

#### 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 scope of this unit will not only limit the students on the effects of COVID-19, but also on epidemiology, medicines, diagnosis treatments, and governmental approaches.

The second year of Biology will focus primarily on anatomy and physiology, specifically paying attention to human anatomy, physiology, and its systems.

The course will start at the cellular level where students will study tissue types and functions. The students will then explore the systems which provide the framework for the human body such as the Circulatory and Respiratory systems. This semester will lead the students through the Skeletal, Muscular, Integumentary, and Immune systems as well.

#### Course Objectives:

- 1. Define coronavirus disease 19 (COVID-19); flatten the curve and raise the line, diagnosis and monitoring of COVID-19, and how to beat the pandemic.
- 2. Describe the organization of animal tissues and organ systems
- 3. Demonstrate a basic understanding of the following topics in animals and humans: structural support and movement, circulation, immunity, respiration.
- 4. Learn how to link different organ systems through their structures and functions.
- 5. Think critically about the processes occurring inside of the human body.
- 6. Gain hands-on experience dissecting animal tissues and relating it to the human body systems.



## EIP Mathayom Course Outline First Semester

### <u>Unit 10 – Human Biology</u>

#### Unit 1: COVID-19

- Introduction COVID-19
- PCR and RT-PCR
- Imaging features of COVID-19
- Beating COVID-19

## Unit 2: Circulatory and Respiratory Systems

| • | 45.1 Human Body Plan    | p 907 |
|---|-------------------------|-------|
| • | 46.1 Circulatory System | p 933 |
| • | 46.2 Blood              | p 940 |
| • | 46.3 Respiratory System | p 946 |

## Unit 3: Skeletal, Muscular, and Integumentary Systems

| • | 45.2 Skeletal System      | p 911 |
|---|---------------------------|-------|
| • | 45.3 Muscular System      | p 917 |
| • | 45.4 Integumentary System | p 924 |

## Unit 4: The Body's Defense System

| • | 47.1 Non Specific Defenses | p 957 |
|---|----------------------------|-------|
| • | 47.2 The immune System     | p 961 |



# EIP Mathayom Evaluation and Grading First Semester

## **Breakdown of Grades**

| Criteria          | 1 <sup>st</sup> quarter | 2 <sup>nd</sup> 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%  |