

# Course Descriptors 2019 - 2020 Semester 1

Biology Mathayom 6



#### EIP Mathayom Course Description Second Year

Subject: Core Biology Department: Science
Grade: Mathayom 6 Course Code: SC33245

Periods: 4 Credit: 2

#### Course Material:

Modern Biology, Holt, Rinehart and Winston

#### Course Description:

The third year of the Core Biology Course will fill in any gaps and create a whole understanding of Life Sciences. This course will explain the relationships between everything that was studied during the first two years of Core Biology.

This biology course is an elective optional course for students wishing to pursue science-based careers after graduation. Sections of the previous years will also be covered in significantly more detail than previously. This course will prepare students for lecture-style university courses and gain a more in-depth knowledge of Biology. Biology topics will range from the cellular-molecular level in animals to genetics, anatomy, and physiology, among others.

#### **Course Objectives:**

- 1. Describe the organization of animal tissues and organ systems
- 2. Understand the principles of cellular life in both plants and animals
- 3. Understand the principles of cellular life in both plants and animals
- 4. Demonstrate a deeper understanding of genetics, cell reproduction and heredity
- 5. Gain knowledge in the impact of computer technology in the field of Biology



#### EIP Mathayom Course Outline First Semester

#### <u>Unit I0 – Anatomy and Physiology</u>

Chapter 48 – Digestive and Excretory Systems

- Nutrients
- Digestive System
- Urinary System

#### Chapter 51 – Reproductive System

- Male Reproductive System
- Female Reproductive System
- Gestation

#### <u>Unit 3 – Genetics</u>

Chapter 10 DNA, RNA, and Protein Synthesis

- Discovery of DNA
- **■** DNA Structure
- **■** DNA Replication
- Protein Synthesis

#### Chapter 11 Gene Expression

- Control of Gene Expression
- Gene Expression in Development and Cell Division

### Chapter 13 Biotechnology

- **■** DNA Technology
- **The Human Genome Project**
- **■** Genetic Engineering



## 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%