THE AMERICAN SCHOOL OF ASUNCION

# 2nd QUARTER SYLLABUS

| TITLE OF COURSE: | GRADE LEVEL/DURATION OF COURSE: | TEACHER NAME & E-MAIL: |
|---|---|---|
| 7th Grade Life Science | 7th Grade/ Full Year | Kristin Page-Botelho<br>kpage@asa.edu.py |

## STANDARDS:

Understand the characteristics, structure, and functions of organisms.

Recognize that all organisms are composed of cells, and that many organisms are single-celled (unicellular). In these single-celled organisms, one cell must carry out all of the basic functions of life.

Recognize that within cells, many of the basic functions of organisms are carried out. The way in which cells function is similar in all living organisms.

## ESSENTIAL QUESTIONS:

**How do scientists organize our knowledge of the universe?**

**How do scientists use evidence, models, and explanations to communicate about discoveries?**

**How do scientists measure change?**

**What forces cause change?**

**What is the relationship between structure and function in objects, organisms, and systems?**

**How do scientists explore, observe, ask questions, collect data, and find patterns?**

## LEARNING OBJECTIVES:

*Vocabulary*

- Structure
- Function
- Cell theory
- Cell membrane
- Phospholipid
- Organelle
- Nucleus
- Cell wall
- Ribosomes
- Endoplasmic reticulum
- Mitochondria
- Chloroplasts
- Golgi complex
- Vesicle
- ATP
- Lysosomes
- DNA
- Vacuoles
- Tissues
- Cell cycle
- Mitosis
- Interphase
- Prophase
- Metaphase
- Anaphase
- Telophase
- Cytokinesis
- Chromosomes
- Homologous chromosomes

***Skills***

- *Identify the parts of a microscope and describe the function of those parts.*
- *Use a microscope to look at cells.*
- *State the 3 parts of the cell theory.*
- *Compare and contrast prokaryotic and eukaryotic cells.*
- *Identify cell structures and define the function of those structures in the cell.*
- *Compare and contrast plant and animal cells, including major organelles.*
- *Illustrate the structure and functions of an organism in terms of cells, tissues, and organ, organ systems, and organisms.*
- *Explain how our understanding of cells and microbes has changed over time.*
- *Recognize and describe the cell cycle.*
- *Use models to represent scientific concepts.*

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## ASSESSMENTS:

Student Grades will be determined by the following:

35% Tests/Quizzes
20% Labs/Hands-on Activities/Projects
15% Class work
10% Nature Journals
10% Participation
10% Homework

**Tests/Quizzes –** Students can expect approximately 1 quiz every two weeks and a comprehensive test at the end of each chapter.

**Labs/Hands-on Activities/Projects** – Students can expect to participate in 1 hands-on activity or lab about every other week as well as several projects throughout the quarter. Students will be provided and instructed about grading rubrics for all projects prior to starting the project.

**Class work** – Students will complete daily warm-ups or science news responses, which will be collected weekly. Students will also complete a variety of in-class assignments on a regular basis.

**Participation** – Students can earn 2 participation points per day. If students are participating positively in class, contributing to class discussions, asking thoughtful questions about topics being taught, working cooperatively with classmates during labs and group-work, and not causing disruption to the learning environment they will earn their participation points.

**Nature Journals** – Students will be given a nature journal assignment approximately every other week. These assignments will incorporate writing, artwork, and reflections on learning. Students will be instructed in class about expectations for each journal entry. Students will also be expected to complete one entry of their choice for every 3 assigned entries. Students will be given a due date and the journals will be collected after every 3rd assigned entry. A grading rubric will be used to grade all journal entries.

**Homework** – Students will be given a variety of homework assignments throughout the quarter. It is expected that all assignments be completed individually. Instruction for all assignments has occurred before assignments are given and therefore assignments are a way of reinforcing concepts taught in class.

## RESOURCES:

*Science and Technology: Life Science*. Holt, Rinehart, and Winston, 2005.

***http://go.hrw.com***

***www*.mrspage.com**

## TEACHER AVAILABLITLY FOR EXTRA HELP AND MEETING WITH STUDENTS:

I will always be available **Mondays and Thursdays** from **3:30-4:15 p.m**. in room **H-11.**