

LIFE SCIENCE SYLLABUS 2024-2025

Teacher: Stephanie Loudor

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Course Description: This course focuses on life science. Students are encouraged to develop an appreciation for the importance of diversity of life, while simultaneously understanding the impact of their roles as individuals in the community of life. Some areas of study include the characteristics of living things, functions of organelles, tissues and organs of various systems in the body, function of chromosomes, and Mendel's laws of genetics. The focus of this course is to prepare students for biology and other life science courses taken in high school. Students are involved in laboratory experiments for a deeper understanding of the concepts.



Classroom Expectations:

CLASSROOM BEHAVIOR: Your behavior in the classroom does not only affect your learning but also affects the learning of those around you. Therefore, I have some straightforward rules to guide you. Please adhere to all rules.

CLASSROOM RULES:

1. Enter class with a growth mindset for learning.
2. Be in your seat when the tardy bell rings.
3. Bring all the texts, homework, and working materials with you.
4. Food and drink are not allowed in classroom
5. Treat others as you want to be treated.
6. Electronic Devices, especially cell phones, should be turned off and placed in your backpack.
- 6.1 iPad must remain in the backpack unless instructed to take it out. The iPad must remain flat on the desk while it is in use.

Consequence for misuse of electronic devices:

- a. 1st offense: warning
 - b. 2nd offense: loss of device until the end of the day
 - c. 3rd offense: device taken to administration
7. Follow all rules listed in the *Archimedean Middle Conservatory*.

CONSEQUENCES FOR BREAKING CLASSROOM RULES*:

1. First incident = verbal warning.
2. Second incident = call/email home to parent.
3. Third incident and beyond = lunch detention or Saturday detention
4. Fourth incident=parent conference with a school personnel (counselor, assistant principal, or principal) and a referral will be filed in accordance with school/district policy.

*The severity of the offense will determine the severity of the consequence

MATERIALS & SUPPLIES

Materials and Supplies Needed:

- Composition notebook
- Pens
- Pencils
- Colored pencils
- Highlighters

- Glue stick
- Scissors
- Markers
- Science folder (*not shared with other classes)

Assessments

○ There will be 2-3 Exams and 3-4 quizzes per grading period.

Test and quiz dates will be announced prior to their administration unless a pop- quiz is in order. You will receive periodic quizzes. So ALWAYS MIND THE DUE DATES!!! Complete all assignments with maximum effort.

Homework: Students should **write down homework daily in their agendas**, as it is assigned by the teacher. Students also should **check Archie (sis.archimedean.org) daily**.

Absences: Students are responsible for all material and work missed when absent. It is the student's responsibility to seek this information.

1. Check Archie for any homework posted even on days absent
2. Email the teacher as soon as possible for any missed material or assignments.
3. Ask classmates for class notes from days absent.
4. Speak with the teacher during homeroom or lunch to clarify any missed items.

Late Assignments: For work turned in late, the following policy will apply: **The assignment will drop one LETTER grade for each school day that passes.** For example, if an assignment is turned in one school day late, the highest a student can receive is 89%; two days late, 79%, ect...



- 1 day late = maximum credit 89%
- 2 days late = maximum credit 79%
- 3 days late = maximum credit 69%
- 4 days late = maximum credit 59%

5-10 days late = maximum credit 50%

Half credit is always better than no credit! Until work has been made up, "Missing" (Which counts as a Zero) will be put in the grade book. This will be updated once work is completed and turned in.

GRADING SCALE

- Exams 40%
- Quizzes/Projects 30%
- Classwork /Participation 20%
- Homework/ Bellringers 10%

Grading Scale:

90-100% = A

80-89% = B

70-79% = C

60-69% = D

Below 60% = F

COURSE OUTLINE

Course Outline: The following units will cover and satisfy the requirements of the Miami-Dade Course of Study for 7th grade life science.

Scientific Process - introductory unit on the scientific method, measurement and safe use of lab equipment.

Biochemistry & Cells- we first answer the question: what is a living thing? We then explore the properties of biologically important molecules including water, nucleic acids, proteins, lipids and carbohydrates and learn how macromolecules are organized in cell organelles and within the hierarchy of living systems.

Cell Processes – we evaluate role of cells in organisms, how they move materials, get energy and reproduce.

DNA and Genetics – we first explore DNA's structure and how it stores and transmits genetic information. Then, in genetics we review how meiotic cell division produces gametes which then combine in fertilization to produce offspring. The heredity resulting from sexual reproduction is explored through classical Mendelian genetics and the use of Punnett squares to predict the outcome of genetic crosses.

Human Anatomy and Physiology - covers major systems of the human body including the digestive, respiratory, cardiovascular, circulatory, reproductive, immune, nervous, and musculoskeletal systems.

Ecology - reviews the classification and organization of life in the biosphere and the interaction of organisms with their environment and with other organisms.

Evolution & Biodiversity – we explore how random genetic variation through mutation and reproduction leads to natural selection and ultimately evolution of species which are specifically adapted to their environment. We then review the resulting diversity of life, how organisms are classified and the key characteristics of the prokaryotic and eukaryotic kingdoms.

Communication

Students or parents with any concerns or comments about the class are encouraged to email the instructor at: stephanie.louidor@archimedean.org. Parents will be notified by email of any academic or behavior concerns. Please include the preferred email address on this form. The teacher will respond in three business days.

LIFE SCIENCE SYLLABUS ACKNOWLEDGEMENT FORM 2024-2025

I have read and understand the above information related to class policies.

Student Name: _____

Class Section: _____

Parent Email:

Parent Phone Number: _____

(Student's signature) Date

(Parent's signature) Date