Pre-AP Biology Course Syllabus

Teacher--Mrs. Morris

Room 109

Email:amorris@atlisd.net Phone:903-796-4411

Office Hours: M-F, 7:30-8:45, and 3:35-4:00

Course Description: This course goes through the smallest parts of living things, through the interactions of all living things in an ecosystem.

Unit 1

Science Safety and Evidence based thinking

Includes lab safety rules, the use of lab equipment, lab reports and the process of discovery

Unit 2

Biochemistry

Includes the chemical background of organisms, and the organic compounds that make them up.

Unit 3

Cells

Includes history of cells, cell parts and how they function to create an organism.

Unit 4

Cellular processes

Photosynthesis and Cellular Respiration

Includes how cells use the two processes to survive and cycle food and energy through an ecosystem.

Unit 5

Cell cycle

Includes the creation and life cycle of the cell. Includes the history and structure of DNA.

Unit 6

Protein Synthesis

Includes transcription and translation of proteins from DNA and how non-functioning protein will disrupt homeostasis. Also includes the controlling factors of protein synthesis and how they differ between prokaryotes and eukaryotes.

Unit 7

Genetics and Heredity Also focuses on how DNA/genes are passed from one generation to another. Includes the mechanisms to prevent mutations and what occurs when those mechanisms do not work. This unit will also include advances in gene technology.

Unit 8

Ecology

Includes the biomes, energy flow, types of relationships, and disturbances in an ecosystem

Unit 9

Evolution

Includes Darwin's theory of natural selection and Hardy-Weinberg's equation on non-evolving populations.

Unit 10

Classification

Uses Linnaeus system of classification to differentiate between the Kingdoms.

Unit 11

Viruses, Bacteria and Protists

Focuses on micro-organisms and their importance to life.

Unit 12

Plant Structures and Adaptations

Includes the cells, tissues and organs of plants that have made them so successful on earth and the adaptations they have to survive in different biomes.

Unit 13

Body Systems

Includes body systems of different animal species, how they are the same and different.

Each unit will have lab activities that correlate with the subject in that unit. We will also be using technology on a regular basis to create projects that will help us understand our topics better.

What you need...

- spiral
- composition notebook for labs
- computer
- wide rule notebook paper
- pencils and pens
- folder

Classroom Rules

- Be responsible.
- Be respectful.
- Cell phones will be turned off and put up at the start of class everyday. If caught not turning off your cell phone, I will keep it until the end of the next class period.
- Restroom passes are allowed during the last 5 minutes of class unless it is an emergency.
- No food or drinks allowed in class.
- Do not use computers unless you ask permission or it is needed for the assignment. Volume must be muted when using computers. No earphones are allowed.

<u>Grading Policy.....</u>Teachers will have a minimum of two grades per week. There will be a minimum of three major grades per six weeks.

Late work policy-student handbook policy-

- 1 day late -20 points
- 2 days late -30 points
- 3 days late -40 points
- 4 days late -50 points
- 5 days late -50 points

work not accepted after 5 days...grade goes in as a zero

Make-up work

You are responsible for make up work. Make-up assignments will be located in the make-up folder. You will have two days to do makeup work.

Retesting

Students will be allowed to retest one failing test every six weeks grading period. The student must approach the teacher for the retest and fill out a tutorial/retest form to schedule a time before or after school for both a tutorial session and the retest. From the time the test is graded the student will have five days to complete both the tutorial and the retest. The highest grade will be taken and will not exceed a 70.