

WELCOME TO BIOLOGY

Mrs. Garcia- Room 385

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In Biology, you will be learning the characteristics of life, from photosynthesis, to ecology to cell structures. Some concepts may come naturally, but others you may have to study. I am going to help provide as many opportunities to you to experience science first hand, practice using the new information, and share this information with you in a variety of different ways.

I ask each of you to:

-Come to class ON TIME

-Give effort

-Turn in every assignment on time

-Show respect to everyone in the classroom

Notes: Notes will be on Google Classroom before the start of the unit. The first day of the unit, you MUST have either the notes: handwritten, printed out, or downloaded and saved onto YOUR drive/desktop in a designated 'Biology Notes' folder. **This will be worth points.** I expect students to be following along and making notations on their notes. Examples are- highlighting, circling, starring notes, adding comments. Laptops or phones are fine for note taking IF you stay on task. If not, phone is taken away and you are writing notes old school.

Homework: Other than responses to videos we will watch, most homework will be classwork that you did not finish in class. So if you use your time wisely, you will rarely ever have homework in my class!! I feel it is important for me to be there to help you through assignments, so we will be making sure class time is used wisely and productively

Late Policy: Any work or projects turned in late will **ONLY RECEIVE 60%** of the total amount of points. Work will only be accepted until the unit test. In other words, once we move into the next unit, I will not accept any old late work.

Absences: If you are absent from class, it is YOUR RESPONSIBILITY to get any handouts from the missing day. All papers will be available for you to pick up for an entire week.

If you are absent one day, you have one extra day to turn in the handouts. If you are absent two days in a row, you get two extra days to turn in any work, etc.

Cell Phone Policy: No cell phone out during lectures or presentations. Cell phones during individual or small group work is acceptable as long as work is being done.

Extra Credit: Extra Credit in my classroom means giving extra effort. I try providing extra credit for each unit, but sometimes can't due to time restraint. Extra credit can be completing an extra assignment, doing a project in a creative manner, being the winner in a classroom competition.

Grading: The class uses a total point system. So 6 10-point assignments count just one 60-point test. So doing every assignment can mean the difference between an entire letter grade.

General Order of Topics Covered

Semester 1:

Scientific Method- How Do You Study Life?

-Concepts include: microscope usage, writing lab reports, analyzing data

Biochemistry- How Do Chemicals Help Organisms Live?

-Concepts include: chemical bonds, periodic table, macromolecules

Cell Functions- What Jobs Do My Cells Do?

-Broken into three large units: all discuss cell organelles

Photosynthesis and Cellular Respiration: chemical reactions, limiting factors

DNA structure and Replication: chemical structure, replication process

Protein Synthesis: process of protein synthesis, mutations, protein functions

Cell Differentiation and Communication- How Do Cells Get Assigned Their Job And Work Together?

-Concepts include: differentiation, stem cells, cell transport, homeostasis, feedback loops

Semester 2:

Meiosis and Genetics- How Do Organisms Pass On Their Genes?

-Concepts include: sexual vs asexual reproduction, inheritance, mutations, epigenetics

Evolution- How Can The Environmental Influence Genetics Change?

-Concepts include: evolution, adaptations, common ancestry, extinction, analysis of evidence

Ecology- How Do The Elements Of An Ecosystem Influence Ecological Stability?

Concepts include: carrying capacity, abiotic cycles, human impact, population, symbiosis

(Note: Sometimes due to time, the order or topics covered may change. This is just a rough guideline for the school year)

Lastly, I want to remind everyone that this is a science course. In this classroom, we discuss studies done by scientists, learn about supported theories and facts, and learn about what we CAN do. We do not address what we SHOULD do. Those are philosophical questions.

Now sometimes in this class, we may have an opportunity to have philosophical discussions, especially when we address more controversial topics. I love giving students these opportunities if we are thoughtful, respectful, and understand that the goal of the class is to not change someone's mind or opinion. All I want is for every student of mine to be as educated about a topic or concept that when you go out in the world, create your opinions, and vote, that it is informed.