

Biology



"You cannot teach a person anything; you can only help them find it within themselves." –Galileo Galilei

Instructor: Alfredo Barrio

Classroom: 10

Email/Twitter: fbarrio@paparts.net

COURSE DESCRIPTION

Biology is the study of life. Through this course you will discover concepts that unify all living things. You will also make connections between biology concepts and the real world. Hands-on labs and activities will reinforce these processes.

GOOGLE CLASSROOM

Login: PAPA E-mail

Password: Student ID Number

UNITS OF STUDY

Fall Semester

Nature of Science and Biology

Topics: Science methodology, laboratory safety, microscope use.

Cytology

Topics: Cell Theory, Mitosis and Meiosis, DNA and RNA, Photosynthesis and Cellular Respiration.

Genetics

Topics: Central Dogma of Biology, Proteins Synthesis, Karyotyping, Genetic Mutations, Punnett Squares, Pedigree Charts

Spring Semester

Ecology

Topics: What is Ecology, Symbiosis, Predator-Prey Cycles, Food chains and Food webs, Abiotic and Biotic factors, Biodiversity. Biogeochemical Cycles.

Evolution

Topics: Natural Selection, Phylogeny, Adaptations and Speciation

Earth and Human Activities

Topics: Biodiversity and Human Impact on Earth's Systems.

MATERIALS

Pen or Pencil
Binder and Dividers
Scientific Calculator

EXPECTATIONS

1. I expect that you earn **HIGH GRADES THROUGH STUDYING**



- A = study and review notes for 20 minutes per night
- B = study and review notes for 15 minutes per night
- C = study and review notes for 10 minutes per night
- D = study and review notes for 5 minutes per night
- F = don't study

2. **What should you expect when you ask me a question?** I generally will not answer your questions directly but will help guide you to answer your own questions.
3. **I expect you TO THINK CRITICALLY during the course of this class!**
4. **I expect that NO FOOD OR DRINK (EXCEPT WATER) will be brought to class.**
5. **I expect to EARN your respect and that you'll EARN mine. The Golden Rule.**
6. **I expect you to be ON-TIME for class.**
7. **I expect to have your attention while teaching.** Anyone who distracts others OR me is a disruption to the educational process and will be warned 1st. Subsequent disturbances will result in a referral to the principal's office.
8. **I expect that you'll keep your hands off of EVERYTHING in my classroom that's not yours unless you are given permission to use/handle a particular item.**
9. **I expect you to only use the COMPUTERS for assignments that are pertinent to this class.**
10. **I expect you to turn your phone off. You will not succeed in this class if you are not paying attention.**
11. **I expect that you'll follow the lab safety procedures. Anyone who doesn't will not be allowed to participate in lab.**

GRADING

Grades will be based on points accumulated in the following areas: summative assignments (written conceptual assignments, practice problems, etc) and summative assessments (tests and quizzes). Test and Quiz retakes are allowed, but you are only allowed 1 retake per assessment. Scheduling a retake is your responsibility.

- 90%-100% A
- 89%-80% B
- 79%-70% C
- 69%-60% D
- 59%-0% F

To calculate grade:

$$(\text{Points earned in class})/(\text{Total points possible}) \times 100\%$$

$$\text{Ex: } (90)/(100) \times 100\% = 90\% \text{ (A)}$$

ATTENDANCE/ MAKE-UP WORK

If you are absent, you are responsible for making up the work promptly. You have 2 days for every day absent. Make arrangements with me to make up tests and labs before or after school or possibly during 8th period. Make every effort to meet deadlines. Grades are updated in the computer regularly so you can keep up with your average and missing assignments (PowerSchool). Be sure to check the class website for assignments, quizzes, exams and other materials you may need.

HIGH SCHOOL COMMITMENT

High school classes have been designed to challenge students with a curriculum that will prepare you for college or adult life. How well you do in high school will determine the opportunities that are made available to you. Learn to build bridges, rather than burn them. As a young adult, you will be expected to take on more responsibilities and be more self-sufficient. This class is no different, in order to succeed you must try and above all advocate for yourself. I tend to be more helpful to those who put in honest work. Show, don't tell me you want to succeed. It is my hope that you will leave high school as a well rounded adult who will be prepared to face the world head on.

