# **Biology Syllabus**

Teacher: Alfredo Barrio Classroom Number: 10

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## **Course Description**

Biology is the study of life. In this class we will be studying concepts that unify all living things. We will apply science and engineering practices to come up with solutions to problems that affect the natural world. Other topics we will cover will include: cytology, genetics, ecology, and evolution.

# **Google Classroom**

We will be using Google Classroom for a wide variety of tasks. Google Classroom should be a resource to help you study for quizzes and tests, submit assignments and to identify objectives for the classroom.

Login: PAPA email

Password: Student ID Number

\*If you forget your password please contact the office.

# **Google Sites:**

It is my goal this year to give you access to resources that can be used in your studies. These sites will be organized by topic and will include a wide variety of tools.



### Units

In this class we will be following the recommended secondary course map as suggested by the New Mexico Public Education Department (NMPED). Every standard is grouped into smaller units of study.

Recommended Secondary Course Map: Biology

#### **Nature of Science:**

Topics: Scientific thinking and practices, Laboratory safety, Microscope techniques, Characteristics of life.

### **Cytology:**

Topics: Cell theory, Mitosis and Meiosis, DNA and RNA, Photosynthesis, Cellular respiration, Homeostasis.

### **Genetics:**

Topics: Protein synthesis, Karyotypes, Genetic mutations, Mendelian genetics, Non-Mendelian genetics, Pedigree charts.

### **Ecology:**

Topics: Symbiosis, Food chains and Food webs, Limiting factors, Population dynamics, Biogeochemical cycles, Biodiversity, Human impact.

#### **Evolution**

Topics: Natural Selection, Common ancestry, Phylogeny, Adaptations and Speciation.

### **Materials**

Pens (Blue or Black)
1" Binder or larger
Laptop
Color Pencils

Pencils
Scientific calculator
Shop towels (1 package)
Non-latex gloves (for labs)

## **Expectations**

1. As a college prep school; PAPA demands high rigor. To earn high grades you must study and practice.

A= Study and review for 20 minutes per night

B= Study and review for 15 minutes per night

C= Study and review for 10 minutes per night

D= Study and review for 05 minutes per night

F= Study and review for <5 minutes per night

- 2. I do not give answers; but will guide you to help you figure out answers on your own.
- 3. Please participate; the more you participate the more you will get out of the class.
- 4. No Food or drinks; except water.
- 5. Please respect things that do not belong to you. Some of the equipment in this class is expensive to replace.
- 6. Please turn off and store your phone while in class. You cannot succeed in this class if you are distracted by phones.
- 7. Please follow lab safety procedures. They are there for a reason. If you cannot; you will not participate.
- 8. Support your classmates.
- 9. Try; even if you do not know the answer. That is part of the learning process.
- 10. Be prepared and on time.

## **Grading**

Grades will be determined based on points. Grades are determined by quizzes, tests, assignments, homework and labs.

- 1. Weekly Assignments: Quizzes, Edpuzzles, Participation, Homework
- 2. Unit Tests
- 3. Midterm and Final Exam

Test/Quiz Corrections- I highly recommend that you complete quiz and test corrections. You can earn up to half of the missed points back on quizzes and tests.

# Missing and Late Work Policy

Missed labs cannot be rescheduled; students will be provided with an alternative assignment. Students with excused absences will **not** lose points for missed labs. Students with unexcused absences will lose participation points for the time they are not in class.

Students with an excused absence will have time equal to the number of days missed to turn in a makeup assignment without penalty.

Missing assignments will be recorded as a "0" with a missing indicator. Please check PowerSchool regularly as I update grades weekly. Missing work will be accepted with a 10% penalty for each day it is late. Missing assignments will not be accepted after 1 week of them being assigned unless prior arrangements have been made.

Grades cannot be changed after the quarter.

It is the student's responsibility to meet with the instructor to schedule a make-up test or quiz.

## **Homework Policy**

There will be one homework assignment every week. This assignment will be given out at the beginning of every week (usually Monday) and is due at the end of the week (usually Friday). It is my recommendation that you break up the assignment into smaller pieces throughout the week. Homework grades will follow the late/missing assignment policy.

## **Grading Scale**

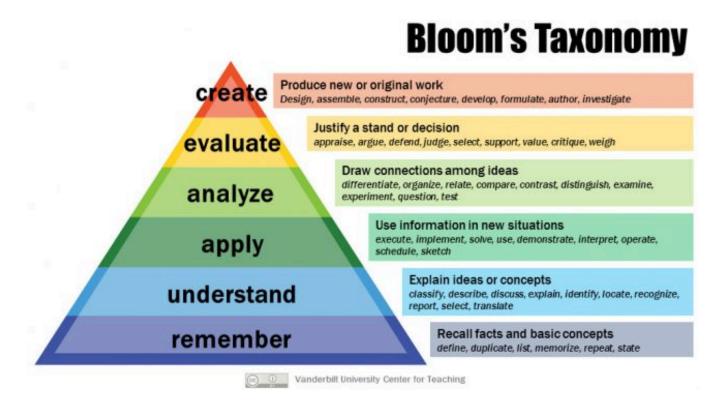
 $\left(\frac{Points\ Earned}{Total\ Points\ Possible}\right) x\ 100\% = Grade$ 90-100% A
80-89% B
70-79% C
60-69% D
>59% F

## **High School Commitment**

High school classes are typically designed to challenge students with a curriculum that will prepare you either for college or adult life. How well you do in high school can influence the opportunities that are made available to you. As a young adult, you will be expected to take on more responsibilities and to 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 an honest effort. 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.

## **Bloom's Taxonomy**

In one sentence, Bloom's taxonomy is a hierarchical ordering of cognitive skills that can help teachers teach and students to learn. In this class we will explore each level of Bloom's taxonomy to help develop your scientific skills and literacy.



## **Lab Safety Contract**

#### **General Lab Procedures:**

- 1. Read the directions and procedures before starting the lab.
- 2. Follow all written and verbal instructions.
- 3. Do not touch any lab material until told to do so.
- 4. Dress appropriately and maintain a clean work station.
- 5. No Running; Pushing, or Playing in the lab.
- 6. Do NOT eat or drink or taste anything in the lab unless told so by the teacher.
- 7. Be aware of your surroundings. Many lab accidents happen because someone is not paying attention.
- 8. Be knowledgeable of what to do if an accident occurs.
- 9. Clean your lab station for the next group.

## Before the Lab

Tie long hair back or away from face No loose hanging clothing or jewelry Wear closed-toe shoes Wear safety goggles and other protective gear Only necessary materials at lab station

## In case of Emergency

Remove self from space Alert teacher immediately Assist teacher when asked

## **Consequences**

First offense will result in a warning to stop infraction.

Second offense will result in removal from the lab and loss of participation points.

Multiple offenses will result in parent contact and potential removal from subsequent labs. An alternative assignment will be provided.

## **Technology Contract**

- I understand that phones should be put in the designated location while in class.
- I will use all forms of technology only when accessing course materials and agree to abide by school policies when making any posts.
- I will refrain from using websites such as wikipedia and info.com when completing research.
- I will provide proper citations for any accessed information.
- I understand that if I use my technology in non-learning mode, while in class, the consequences are as follows:
- 1. On the first offense, the student will be given a warning.
- 2. On the second offense, the phone will be confiscated for the duration of class.
- 3. On the third offense, the phone will be confiscated and will result in parent/guardian contact.
- 4. Any further offenses will be handled with the help of administrative help.
- I understand that if I choose to post materials or comments that do not follow school policy, I am subject to the consequences laid out in the student handbook.

Name: _		Date:	Pd
Syllabus, Lab Safety & Technology Contract			
Please read the follocation after readi	lowing statements with ng each statement.	your student. <b>Initi</b>	al in the correct
	I have read and fully u	nderstand the clas	s syllabus.
	I have read and fully u	inderstand the lab	safety policy.
	I have accessed Google	e classroom.	
	I have read and unders	tand the technolog	y contract.
	I understand that anyth online platforms must		
Student Name Prin	ited:		
Student Signature:		Date:_	

Parent/Guardian Signature: \_\_\_\_\_\_Date: \_\_\_\_\_