Biology

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

-Galileo Galilei

Instructor: _Alfredo Barrio Classroom: 10
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COURSE DESCRIPTION

Biology is the study of life. Through this course you will discover concepts that unify all living things. We will apply science and engineering practices, develop an understanding of genetics, ecology and evolution.

GOOGLE CLASSROOM

Login: PAPA E-mail

Password: Student ID Number

UNITS OF STUDY

In this class, we will be following the recommended secondary course map as suggested by the New Mexico Public Education Department (NMPED). Below is a link to the course map. Following the hyperlink in order to read a more in depth analysis of each standard.

Recommended Secondary Course Map: Biology

Nature of Science

Topics: Scientific thinking and practices, laboratory safety, engineering and design solution.

Cytology

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

Genetics

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

Ecology

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

Evolution

Topics: Natural Selection, Phylogeny, Adaptations and Speciation

Earth and Human Activities

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

Weekly Schedule for Online Learning

Monday	Tuesday	Wednesday	Thursday	Friday
Zoom Meeting	Ed Puzzle	Zoom Meeting	Online Practice	<u>Assessment</u>
Review & Preview	Video or Lab Demonstration.	Discussion and Application of	Individual practice covering	Quizzes or Tests that reflect weeks
Content Notes		Content.	standards for the week.	content.

MATERIALS

Pens (Blue or Black)
Binder and 6 Dividers
Scientific Calculator (optional; but highly encouraged)

Pencils Sticky Notes Highlighters

EXPECTATIONS (Traditional and Hybrid Learning)

- 1. I expect that you earn HIGH GRADES THROUGH STUDYING
 - A =study and review notes for 20 minutes per night
 - \mathbf{B} = study and review notes for 15 minutes per night
 - C = study and review notes for 10 minutes per night
 - \mathbf{D} = study and review notes for 5 minutes per night
 - F = less than 5 minutes per night



- 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 receive a verbal warning. Subsequent disturbances will result in a referral to the office and or a parent-teacher conference.
- 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 the lab.

EXPECTATIONS (Hybrid and Online Learning)

- 1. Students are expected to complete online assignments by the given due date unless accommodations have been made prior.
- 2. Students are required to attend weekly zoom meetings during their assigned class period. See schedule for more details. Failure to attend without proper documentation (doctor's note) will result in a zero for attendance and participation for the day.
- 3. All other expectations from a hybrid and traditional model still apply.



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). Grades will also be based on each of the following criteria as it applies to virtual learning:

- 1. Content Notes, EdPuzzles, discussions and online practice will be graded on a participation and completion basis.
- 2. Students will be required to participate in class everyday to earn their attendance grade. They must be present at Zoom meetings to get these points.
- 3. All units of study will have multiple weekly quizzes and culminate in a Final Unit Test.
- 4. Students will be allowed to take quizzes as many times as they would like. Grades for quizzes will be determined using an average of a student's first and last grade.
- 5. On Unit tests, a score of 80% or higher is considered proficient. Any score below that will require the student to complete test corrections. Students can earn up to half of the missed points back.

MISSING AND LATE WORK POLICY

Missed classroom activities cannot be rescheduled. Students with excused absences will not lose the points for the time missed. Students with unexcused absences will lose points for the time they are not in class or completing online work.

Missing assignments will be recorded as 0s with a missing indicator. Missing work will be accepted with a penalty of 10% taken off for each late day, capped at 50%. No late work will be accepted after the Unit Test has taken place.

It is the student's responsibility to meet with the instructor to schedule a make-up test. Tests that are completed without teacher approval will result in a zero.

GRADING SCALE

.90-1.00	A	To calculate grade:
.8980	В	Points Earned
.7970	\mathbf{C}	Total Points Possible
.6960	D	
.59-0	\mathbf{F}	Ex: (90)/(100)= .9 or A

END OF COURSE EXAM (EOC)

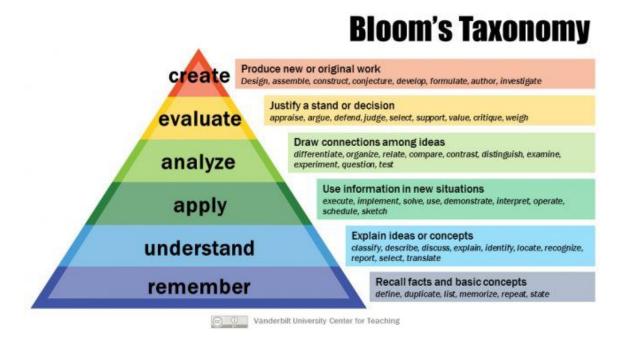
The end of course exam is a cumulative assessment given by the state of New Mexico to test a student's competency of material learned in the year. As part of the high school graduation requirement students are required to pass at least 1 science EOC during their high school career. The EOC will also be used as the final exam in my class.

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.

Bloom's Taxonomy

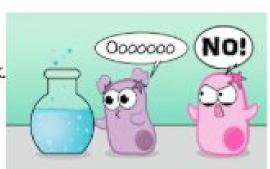
In one sentence, Bloom's Taxonomy is a hierarchical ordering of cognitive skills that can, among countless other uses, help teachers teach and students learn. In this class we will explore each level of Bloom's taxonomy to help develop our understanding of the concepts discussed in this class.



Lab Safety Contract

General Lab Procedures:

- Follow all written and verbal instructions fully.
- Do not touch any lab materials prior to being instructed to do so.
- Read each lab in its entirety before starting any work.
- Dress appropriately and maintain a clean station.
- No horseplay
- No food or drink permitted during labs
- Never eat, drink, sniff, or apply any lab materials unless expressly instructed to do so.
- Be knowledgeable of what to do if an accident occurs.
- All lab stations are expected to be reset for the next group.



Before the Lab

- ★ Long Hair must be tied back and/or secured ★ away from face
- ★ No loose hanging clothing or jewelry
- ★ Wear closed-toe shoes
- ★ When appropriate wear safety goggles and/or other protective gear
- Only necessary materials should be at lab stations

In case of an emergency

- Remove self and others away from space if necessary
- Alert teacher immediately
- Be knowledgeable of classroom fire drill policy and procedure
- Assist teacher only as instructed



Consequences

- First Offense: Student will be given a warning to cease and desist infraction.
- Second Offense: Student will be removed from lab and will forfeit all points. Parent(s)/guardian will be contacted.
- * Students who are removed from more than one lab will be placed on probation and will not be allowed to participate in labs until the teacher deems appropriate. Parent(s)/guardian and administration will be contacted.
- All consequences will be based on severity of infraction.

Technology Contract

- I will only use my phone after obtaining permission from my teacher.
- 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.com and info.com when completing research.
- I will provide citations for any and all accessed information.

I understand that if I use my technology in non-learning mode, while in class, the consequences are as follows:

- On the first offense, the student will be given a warning.
- On the second offense, the phone will be confiscated for the duration of class.
- On the third offense, the phone will be confiscated and sent to the office until a parent/guardian picks it up.
- Any further offenses will be handled through the office.

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.

Failure to provide accurate and complete citations will result in a 0 for the assignment on the first offense. Any further offences will be handled at the discretion of the administration. All occurrences will result in parent contact.

Syllabus and Lab Safety/Technology Contract

Please read the following statements with your student. Initial along with your student after reading each statement.
I have read and fully understand the class syllabus.
I have read and fully understand the lab safety rules and consequences.
I have accessed the classroom website and know how to locate needed
information.
I understand that if I use my technology in non-learning mode, while in class, th
consequences are as follows:
 On the first offense, the student will be given a warning. On the second offense, the phone will be confiscated for the duration of class. On the third offense, the phone will be confiscated and sent to the office unti a parent/guardian picks it up. Any further offenses will be handled through the office.
$_$ I understand that anything that I post on any of our class/ school online
platforms must follow the school's rules of conduct.
I understand that returning this signed form, on-time, counts as my first quiz
grade for the year and the student will be barred from science investigations
until the signed contract is returned.
Student Name Printed:
Student Signature: Date:
Parent Signature:Date:
Parent email: