PARENT LETTER

Please save for future reference



Dear Parent and/or Guardian,

Greetings! My name is Mr. Zimny and I am your child's Biology teacher at Julia R Masterman School. You and your child will hopefully find I have planned an exciting and extremely productive school year. My particular style of teaching is based on three principles: setting high expectations for *EVERY* student, showing respect for all students and expecting respect in return, and parental involvement. It is my belief that when parents and teachers work together a student can accomplish anything. It is my hope to talk with the parents and/or guardians of all the students in my classes. I plan to contact you personally in the next month and throughout the year to inform you of student progress. Please feel free to contact me in any of the following ways:

Email: rzimmy@philasd.org (yes, my name is spelled incorrectly for this email...)

To help your child succeed in my challenging science class, there are four simple things that you can do:

- 1. ENFORCE STUDY TIME AT HOME— I hope to see that every child succeeds in Biology class and this can only occur if they are performing well on assessments (test & quizzes). Their performance on assessments is contingent on consistent homework completion and independent studying. If they do not have homework for a given night they can be reviewing their notes and classwork in preparation for upcoming tests and quizzes. This is a good practice for future academic success.
- 2. **ENCOURAGE**—Encourage your student to ask questions in class and come in for extra help when they need it. Additional tutoring is available free of charge for all students. I also hold weekly office hours for students to come and talk to me individually, get extra help, etc. Also, praise them for doing well, they deserve it!
- 3. **PROGRESS REPORTS**—Ask your child to see their planner. They are given one in the beginning of the school year and should be writing down their upcoming assignments in them . Interim progress reports will be released at the midway point of every semester and will contain details on classwork and homework completion as well as student behavior. When these reports are released, please sign them and return them to school with the student.
- 4. **SUPPLIES** Every student has a different learning style and should have learning effective methods for staying organized based upon their learning style. It is not my goal to force the students be organized in one particular fashion. Whatever way is effective for your student works for me. With that in mind I would **recommend** the following supplies for your students success.

-A 3 ring binder OR a notebook and folder solely for Biology class (I personally prefer the 3 ring binder)

-A writing utensil of some kind

-A set of index cards somewhere between 200-300 (you will not need these all at once) They should have these items with them on a daily basis. Please feel free to contact me if you or your student cannot get any of these supplies and we will work a system out privately.

I look forward to working with you and your child!

Sincerely,

Mr. Zimny Biology Teacher at *Julia R Masterman School*

AP Biology 2018-2019 - About The Class

Course Description

AP Biology is an introductory year long college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions. This course follows the College Board Advanced Placement syllabus and students must take the national college board exam in May.

Successfully passing the AP Biology Exam is meant to take the place of two 4 credit college level lab science general biology classes. It is typically recommended to college students that they spend 6 hours a week in the classroom/ laboratory and an additional 6 to 9 hours outside of class studying per week for each of these two classes. Prerequisites for this class are an (A) Average in General Biology & an (A or B) average in General Chemistry

Big Ideas

The AP Biology curriculum framework is divided into broad groups of concept that run throughout most of biology called Big Ideas; they are supported by additional themes and concepts as articulated in the learning objectives.

Big Idea 1: The process of evolution drives the diversity and unity of life.

Big Idea 2: Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis.

Big Idea 3: Living systems store, retrieve, transmit and respond to information essential to life processes.

Big Idea 4: Biological systems interact, and these systems and their interactions possess complex properties.

Science Practices

The AP Biology Exam also asks students to develop and use certain scientific practices in the effort to model actual, genuine scientific research. The exam asks students to establish lines of evidence and use them to develop and refine testable explanations and predictions of natural phenomena. Focusing on these disciplinary practices enables teachers to use the principles of scientific inquiry to promote a more engaging and rigorous experience for AP Biology students. The 7 science practices are:

- Use representations and models to communicate scientific phenomena and solve scientific problems;
- Use mathematics appropriately;
- Engage in scientific questioning to extend thinking or to guide investigations within the context of the AP course;
- Plan and implement data collection strategies in relation to a particular scientific question;
- Perform data analysis and evaluation of evidence;

- Work with scientific explanations and theories; and
- Connect and relate knowledge across various scales, concepts, and representations in and across domains.

Laboratory

It is strongly recommended that the course be taught using an inquiry model, allow students to take ownership over their learning. It is also recommended that approximately 25% of the time spent in class be spent performing labs. The following labs will be attempted should ample enough time be permitted:

Lab 1: Artificial Selection Lab 2: Mathematical Modeling: Hardy-Weinberg Lab 3: Comparative Evolution: DNA BLAST Lab 4: Diffusion & Osmosis Lab 5: Photosynthesis Lab 6: Cellular Respiration Lab 7: Cell Division: Mitosis & Meiosis Lab 8: Biotechnology: Bacterial Transformation Lab 9: Biotechnology: Restriction Enzyme Analysis of DNA Lab 10: Energy Dynamics Lab 11: Transpiration Lab 12: Animal Behavior Lab 13: Enzyme Activity

In summary, these labs allow students to show their mastery of laboratory skills and knowledge. Frequently questions from the AP Exam mirror the activities performed in these labs. Additional activities and labs may also supplement this list, including outside speakers & trips.

AP Biology Examination

The AP Biology Examination is 3 hours in length and is designed to measure a student's knowledge and understanding of modern biology, as well as critical reasoning skills. The exam consists of two main sections: a 90 minute, 69 question multiple choice section, worth 50% of the exam score and a 8 question free response section, worth the other 50% of the exam score. The multiple choice section consists of 63 "true" multiple choice questions and 6 grid-in questions. The free response section consists of 2 long free response questions and 6 short free response questions. Students are alloted 1 hour and 30 minutes for each section. The exam was redesigned in approximately 2008. This years exam will be administered May 13, 2019.

Academic Integrity Policy

The school has an established policy on Academic Integrity. A copy of it can be provided at your request. Please know that this policy will be rigorously adhered to. Please know that submitting someone else's work as your own and fabricating data count as violations of the school's Academic Integrity Policy in addition to cheating.

Grades

As per the school district's policy on grading, the following components make your overall grade Tests/ Quizzes/ Other Assessments 40% Projects & Labs 30%

Classwork 20% Homework 10%

Classwork grades will consist of a weekly, holistic grade based upon teacher observations. For AP Biology the 10% of portion of the grade consisting of homework will be merged into the classwork grade meaning there is a 30% component from homework & classwork.

Materials

Please purchase the following items:

-A binder or notebook & folder for classwork (I prefer a binder over the notebook & folder option, but you are Seniors so you should know what works best for you)

-A writing utensil (A daily expectation)

-Lab notebook with carbon copy pages*

-Barron's AP Biology 6th Edition Test Prep Guide*

-A flash drives for lab data (you may use one that you already have)

*=the teacher will potential purchase these at a discount and will get back to you as soon as possible regarding this matter.

In conclusion

I am looking forward to helping all my AP Biology students build confidence as we work our way to May and the AP Biology Exam. This exam is usually the Monday of the second week of the AP schedule.