

College Prep Biology

Instructor: Mrs. Ashley Griffith

Course Description:

This course will deal with the study of life from the molecular level to that of the biosphere. Students will investigate living things and their interactions with other organisms in order to obtain a better understanding and appreciation of life on earth. Topics include statistical analysis, cell biology, biochemistry, genetics, ecology, evolution, taxonomy, and the life processes of plants and animals. In addition to the core material, students will be provided with the opportunity to search and discover biology through laboratory experimentation, references to current research, and exploration of appropriate internet resources.

Materials Needed:

To include (but not limited to) loose leaf and graph paper, a folder/ binder (for notes, labs, and worksheets), iPad, and colored pencils.

Texts: ebook: Campbell Biology: Concepts and Connections 8e (chapters to be downloaded per unit so as to be accessible without internet access should the need arise)

Academic Expectations:

Students will be presented with lecture materials for discussion and will be expected to participate in discussions (and activities) and take notes on materials presented. Students will be expected to prepare for class activities by researching scientific literature in addition to reading assigned sections of the textbook and supplementary materials presented in class. Students will conduct individualized laboratory investigations. Completion of lab reports according to a standard format used for communication of experimental results will be a requisite for passing the course. Essays and formal presentations may be expected of all members of the class. Homework, depending upon the daily applicability, will concern itself with the preparation for class or lab, the practice and reinforcement of learned scientific procedures, or the extension of learned principles utilizing the student's own innovative thought. All work and activities will be conducted within the spirit of the MPS **Academic Honesty Policy**.

Classroom Expectations:

Students must be prepared for class each day by:

- (a) being quietly seated and in proper uniform attire when the bell rings
- (b) having charged iPad, notebook, pens and any other specific items ready for use
- (c) having in their possession the completed previously assigned tasks
- (d) all items not required for class must be placed on the counter in the back of the room prior to the bell

Behavioral Expectations:

All behaviors in the classroom should be based on academic integrity and respect for self and others. Students will be expected to take responsibility for following the discipline policies stated in the student handbook (including the MPS Tier method of discipline). Failure to exercise self-discipline or disregard for lab safety will be viewed seriously.

Due to the very nature of the course's investigations and experiments, safety of all individuals involved is a major concern. General safety regulations will be posted in the class and reviewed. In addition, specific precautions will be explained as they appear in the investigations. **DISREGARD FOR THE SAFETY REGULATIONS WILL NOT BE TOLERATED.**

Evaluation:

Evaluation of student achievement will be based upon the following criteria: exams, announced or unannounced quizzes, lab reports, in class assignments and homework assignments (not all will be graded). The midterm and final assessment will constitute 1/7th (one-seventh) of the final grade. The standard grading scale will follow those listed in the *Student Handbook*. A list of current assignments and due dates will be posted at www.mpslakers.com. Student marks will be updated on **PowerTeacher**. It is the student's responsibility to maintain his/her assignments. Students are advised to save a copy in their server folders of all graded work generated by computer and a hard copy of all other work. In the event of a missing assignment, the burden of proof that the assignment was completed by the deadline rests with the student. Students should also save all graded and returned papers in case of a grade question. Again, the burden of proof in any grade discrepancy rests with the student.

Reduced point values will be awarded for assignments handed in after the date due. The assignment will be worth 3/4 of the value if one day late, 1/2 of value if two days late, 1/4 of value if three days late and no value if four or more days late. (Days refer to CALENDAR days). If a student is absent on the day of a test or quiz, she/he should meet with the instructor the **DAY OF RETURN TO SCHOOL** to schedule any missed material or exams. Students may forfeit credit if they fail to make up exams in a timely fashion. Please consult the student handbook in regards to vacations. The rigors and pacing of this course will make it extremely difficult to make up missed work due to a vacation, and in lab situations it would be nearly impossible.

Laboratory Activities:

Experiments are not only designed to reinforce biological concepts but also to stimulate new ideas and creative thought. To this end, **safety** will be a priority considered in all laboratory activities. A general guideline pertaining to laboratory rules and conduct will be distributed as well as individual lab-specific directions as needed.

A critical component of biology is the actual hands-on experience with organisms – including dissection. Representative organism(s) are chosen so that the student can gain an insight into how complex and yet fragile organisms are. The intent of dissection is to gain knowledge as well as instill an appreciation for life and develop an attitude of stewardship towards the earth.

Proper Use of iPad:

The published **Acceptable Use Policy (AUP)** guidelines will be in effect at all times with specific class protocols to be furnished verbally as the year progresses. The iPads are property of Mercyhurst Prep and their use is a privilege, not a right, and unacceptable use could result in that privilege being suspended in this class. There will be classes and times within class that the iPads will not be in use and must be completely put away.

Extra Help:

The goal of this course is for you to find success in your understanding of life, so don't be shy in asking for clarification. The instructor will meet with any student (at a mutually agreeable time) to aid the student in the successful completion of the course. Make sure to make an appointment before an upcoming quiz or test date and come prepared. Feel free to email me at agriffith@mpslakers.com, and as new technology unfolds, there should be exciting new mechanisms for communication available.

****** There may be additional expectations that will be considered as the year develops.

******* Parents are encouraged to contact me (agriffith@mpslakers.com) at any time with questions or concerns and are invited to join in the learning process.