Biology I

2020-2021

Mrs. Kaitlyn Prekrel Room # 202-A

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Phone Number:

Ext. 1561

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Course Description

Biology I is a course designed to present students with an environmental, macro, molecular, cellular and evolutionary view of the interactions of life on earth. Students explore and discover principles that may be in operation universally that cause life forms to arise, prosper, and change in any appropriate environment. Biological concepts to explain the uniqueness and interdependence of living organisms, their interactions with the environment, and the continuation of life on earth. Biology is the study of the structure, function and interactions of living and non-living things. The course prepares students for the Maryland Integrated Science Assessment which is required for graduation. STEM concepts and practices are embedded in this course throughout this course of study.

9th grade students taking this course with have an additional component including the ShoreRivers Staff. Students will be required to complete an action project in order to fulfill their MWEE (Meaningful Watershed Educational Experience) requirement.

Course Requirements

Students will be required to take the MISA assessment at the end of the course and complete an action project aligned with the NGSS and MWEE standards.

A hard working and positive attitude.

Text/Resources

SEPUP. (2016). **Science and Global Issues: Biology**, 2nd edition. The Lawrence Hall of Science, University of California, Berkeley Published by LAB-AIDS®, Inc., Ronkonkama, NY

Login information:
Username: school ID number @dcpsmd.org
Password: eagles2020

Units of Study

• Sustainability

Ecology: Living on Earth
Cell Biology: World Health
Genetics: Feeding the World
Evolution: Maintaining Diversity

Required Materials:

yellow highlights for in person learning only

- 1 notebook for an interactive notebook (with a hard cover and pocket is optional)
 - o Students will need a notebook in order to complete an interactive notebook. Students will use this to take notes with, collect data, paste some assignments etc.
- Scissors (to keep at home)
- Glue (to keep at home)
- Folder with pockets (optional)
- pencils/pens
- loose leaf paper binder paper (optional)
- A POSITIVE HARD-WORKING ATTITUDE!
- Laptop or School issued laptop for class
- Internet Acess

Grading Policy

Categories	Percent of Total Term Grade			
Summative	60%			
Formative	40%			
Please refer to the county calendar for a complete explanation of this year's grading policy.				

Grade sheets will be printed and given to students upon student's) request. If a student would like to check on the accuracy of a grade, students MUST be able to provide proof of keeping the assignment either in a folder, their notebook etc. in order for the instructor to accurately check and or correct grading records if necessary. Checking grades are the responsibility of the student, and any appeals to published grades must be accompanied by the work in question. Any questions outside of school hours can be directed to the teacher email listed above or a message left to my school voicemail. Students may ask questions regarding grades before the bell to start class or at the end of the class period with the teacher's discretion.

It is advisable that you retain papers for the duration of the semester to assist in studying for cumulative quizzes and the final exam.

Make-up work

Make-up work can be completed for excused absences *only* <u>as outlined in the student handbook</u>. It is the student's responsibility to obtain make-up work from the teacher. Once you receive the work from your teacher, your work will be due within the time allowed in the student handbook. Work for unexcused absences will not be accepted and will be given a grade of 0. See Your Student handbook, the procedure for makeup work listed below, and the instructor for any additional questions.

Biology Pacing Guide Outline

- I. Evolution (8-10 days)
 - 1. Theory of evolution [4-1, 4-2, 4-5]
 - 2. Evidence of Evolution [4-1, 4-3]
 - 3. Natural Selection [4-1, 4-2, 4-3, 4-4]
 - 4. Adaptation and Speciation [4-1, 4-2, 4-3, 4-4]
- II. Sustainability (5 days including work with Shore Rivers)

All ESS standards embedded. No performance matters assessment [ESS 3-1, ESS 3-2, ESS 3-3, ESS 3-4]

- 1. Environmental Literacy Credit/ action projects
- 2. Ecological Footprint
- 3. Planet 100
- 4. Jaffery City Lab
- III. Interdependent Relationships in Ecosystems (16-20 days)
 - 1. Ecosystems and Change [2-2, 2-6, 2-8]
 - 2. Populations [2-1, 2-4, 2-6, -2-8]
 - 3. Energy Flow through an Ecosystem [2-2, 2-4, 2-6, 2-8]
 - 4. Symbiotic Relationships [2-2, 2-6]
 - 5. Invasive Species [2-4, 2-6, 2-8]
 - Tragedy of Commons [2-2, 2-4, 2-6, 2-8]
 - 7. Succession
- IV. Matter and Energy (10-11 days)
 - 1. Biomolecules [1-6, 2-5]
 - 2. Earth's Spheres [2-4]
 - 3. Photosynthesis [1-5, 2-5]
 - 4. Cellular Respiration [1-7, 2-3, 2-5]
- V. Structure and Function (8-10 days)
 - 1. +/- Prokaryote vs Eukaryotes (plant vs. animal) review [1-1, 1-2]
 - 2. DNA [1-1]
 - 3. RNA [1-1]
 - 4. Body Systems and feedback mechanism [1-3]
- VI. Inheritance and Variation of Traits (8-10 days)
 - 1. Cell Cycle [1-4]
 - 2. Cell Division [1-4, 3-2]
 - 3. Mutations [3-2]
 - 4. Monohybrid, Dihybrids and Pedigrees [3-1, 3-3]
- VII. MISA review

Online Etiquette:

Since we are in the age of technology, it is imperative to know the appropriate way to conduct yourself online in a professional manner. Below you will find a chart with tips for appropriate online etiquette as well as the link to the university website that uses these guidelines.

https://potomac.edu/netiquette-rules-online-students/

1. Be Careful With Your Tone	■ 8. Remember That Nothing Is Private		
1 2. Be Accurate and Factual	Online		
3. Search First, Then Ask	1 9. Make Clear and Brief Points		
1 4. Don't Use Sarcasm Freely	1 10. Respect People's Privacy		
1 5. Be as Polite as You Are In Person	1 11. Use Your Professors' Proper Titles		
6. Use Proper Grammar and Punctuation	1 12. Respect Others' Opinions		
	1 13. Don't Overuse the Chat Box		
1 7. Stay on Topic	1 14. Submit Assignments Carefully		

Classroom Rules and Expectations

- NO TALKING while the teacher or other students are talking
- MUST be in your assigned seat and working on the warm-up by the late bell!
 - o (Seats may change periodically)
- Be Respectful to school property and classroom supplies
 - o (NO throwing of supplies, hands to your self)
- No Profanity!
- No Bullying! Period!!!
- Complete all assigned tasks and assignments! Do you VERY best!
- Abide by all schools rules and policies including no hats, hootds, headphones, cell phones or cheating;
 - <u>CHEATING WILL NOT BE TOLERATED AND IS INEXCUSABLE AND WILL BE DEALT WITH ACCORDING TO THE STUDENT HANDBOOK.</u>
- Cell Phone and technology use is **NOT** tolerated within the classroom, during instruction (see student handbook) unless otherwise noted by the teacher for instructional purposes. See objective board for your stop light signals!
 - o Red- no use of phones at all today
 - Yellow- some use of phones, wait for teacher prompting
 - o Green- using phones all day! Wait for teacher prompting

Consequences for breaking cell phone rules

- 1st warning
- taken for the remainder of the class period
- 2nd warming
- Taken and turned into the office for parent pick-up
- Lunch detention for each time caught with phone out after the final parent phone pick up

Common Group Discussion Rules:

- Speak when called upon or asked to respond
- Think kindly before speaking
- Discuss ideas, do not attack people
- Always back up statements with evidence
- Direct comments at the group only not at individuals
- Refrain from side conversations while others are speaking

Consequences for Breaking Classroom Rules:

- Warning (verbal and nonverbal)
- Student Teacher Conference (before, during or after class)
- Call/contact home
- Lunch detention
- After school detention
- Write up Referral/asked to leave the classroom

*Certain behaviors may warrant the immediate dismissal of a student(s) from the classroom immediately at the teachers discretion in regards to the safety of the class and to remain focused on instructional minutes. *

Classroom Procedures:

1. Entering the Classroom

• Enter the room **quietly** and sit in your **assigned seat** with all required materials; everyday!

^{*} You will be allowed to use their cell phone only at designated times during class for educational uses only.. If you're using your cell phone in an inappropriate manner (ie texting, calls, social media), the instructor will request your phone and the appropriate discipline action will be taken.

^{*} The instructor, Mrs. Prekrel is not responsible if your phone becomes misplaced during school hours. Individuals assume full responsibility for their person electronic devices as well as their Board-assigned devices. DCPS is not responsible for the loss of, or damage to, student or staff-own personal electronic devices (per DCPS calendar).

- BRING YOUR NOTEBOOK AND A PENCIL AND A POSITIVE ATTITUDE EVERYDAY! AT THE BELL YOU MUST BE IN YOUR ASSIGNED SEATS
- Get out OR grab a new Warm-Up Paper
 - Copy the warm-up question, your answer to the question and the lesson objective onto your warm-up paper that is posed on the front board. THIS WILL BE COLLECTED AT THE END OF EACH WEEK FOR A FORMATIVE ASSESSMENT GRADE
- Work on warm-up until the teacher signals to begin class

2. Retrieving Absent Work

- IF YOU ARE AWARE THAT YOU WILL BE ABSENT, ESPECIALLY FOR AN EXTENDED PERIOD OF TIME, PLEASE ALERT THE TEACHER NO LESS THAN 48 HOURS BEFORE THE ANTICIPATED ABSENCE IN ORDER TO COLLECT WORK FOR THE STUDENTS
- When returning, before beginning any warm-up activity, go to the designated corner in the classroom for missed work, find the folder marked with the date of the month you were absent, find the work with your name on it and return to your assigned seat.
 - DO THIS BEFORE OR AFTER CLASS NOT DURING!
- Make-up work will be accepted and graded according to the timeline specified within the student handbook.
- IF, you need to make-up a lab activity, test, quiz, etc. YOU WILL NEED TO SCHEDULE TIME TO MEET WITH THE TEACHER AFTER SCHOOL TO COMPLETE THE ASSIGNMENT OR THE ALTERNATE ASSIGNMENT.
- Any work (formative or summative) not turned in by the next summative assessment will remain
 a ZERO NO EXCEPTIONS! (This is according to county policy. See the Student Handbook for
 details).
- Picking up, making up and turning in absent work is on the responsibility of the students; which
 includes getting notes and materials missed in class. IT is the students responsibility to ask for
 guidance and support in completing make-up assignments within the designated timeline. <u>ANY</u>
 QUESTIONS REGARDING MAKE-UP WORK WILL BE ADDRESSED AFTER CLASS BEGINS, IN THE
 MORNINGS BEFORE HOMEROOM, OR AFTERSCHOOL; NOT DURING INSTRUCITONAL TIME!!

3. Turning in work

• At the front of the classroom, you will see a red bin known as "The Bin". This is where any and all work that needs to be turned into me MUST go. IF its NOT in the Bin, it will NOT get graded.

- At the beginning of the period, when you enter the room, before you begin your warm-up, you
 are to place any and all homework assignments, make-up work etc. in the mailbox BEFORE I
 CALL CLASS TO ORDER! NOT WHILE I AM TALKING AND TEACHING!!! Do not leave your seat
 during class to turn in an assignment; only before and after class or when directed to do so.
- As you finish work within the class period, you are encouraged and will be reminded to be sure to turn all work into the bin.
- REMEMBER, PLEASE PUT YOUR NAME, PERIOD AND DATE ON ALL ASSIGNMENTS! NO NAME,
 NO GRADE! NO EXCEPTIONS! IF ITS NOT IN THE BIN IT WON'T GET GRADED!
 - There will be a designated spot for no name papers.

4. Lab and Group Activities

Please review the Flynn Lab Safety Contract for further details on lab safety. (SEE ATTACHED)

- When there is a lab or activity planned, you MUST attentively listen to the teacher's directions before beginning. As the teacher is talking and reviewing directions (especially those for safety) you WILL be listening. YOU WILL NOT BEGIN UNTIL INSTRUCTED TO DO SO!
- You will work with you assigned lab group to your assigned lab area with your assigned lab materials. You will NOT pick or changed group unless specified by the teacher.
- THERE WILL BE ABSOLUTELY NO HORSEPLAY DURING ANY LAB OR GROUP ACTIVITY! NO CELL PHONES, NOT EATING AND NO STEALING OF ANY LAB OR ACTIVITY MATERIALS!
 - This type of behavior is not tolerated and you will be asked to leave with disciplinary repercussions to follow.
- You will work until you receive the signal to clean up. You WILL clean up you area or you will NOT be permitted to leave until all has been returned and cleaned up.
- If at any point during the activity or lab you need to leave, please consult the teacher IMMEDIATELY!

5. Leaving the Classroom

Once the last activity is done, listen attentively for the teacher's instructions for closing the
period including an exit questions, homework, assignments, and upcoming dates to remember.
 If you do NOT complete the closing activity due to lack of effort or participation, you will NOT be
permitted to make-up the activity.

 YOU ARE NOT PERMITTED TO EXIT THE CLASSROOM UNTIL FORMALLY DISMISSED BY THE TEACHER! PLEASE remember to push in your chairs, clean up everything and leave quietly and respectfully

6. Activity Transitions

- Before beginning ANY group or hands on activity or collaborative work, you WILL listen to the
 teacher's instruction FIRST, QUIETLY! Do NOT move from your seats until directed by the
 teacher. As the teacher is speaking, you MUST listen attentively. <u>Do NOT talk while instructions</u>
 are being given.
- Once directions are received, you will be directed to move to your designated area, retrieve
 materials etc. You <u>MUST walk quietly and respectfully about the classroom</u>. ANY misconduct
 will result in automatic removal from the activity and if needed the classroom.
- When it is time to transition or the teacher has an announcement to make, the teacher will signal the class using a nonverbal signal (RAISING OF THE HAND AND ASKED TO FREEZE PLEASE).
 When you hear the signal, STOP ALL THAT YOU ARE DOING, AND QUIETLY LISTEN FOR INSTRUCTIONS.
- When the activity is over, the teacher will sound the final warning and ask you to clean up, move quietly back to your assigned seats and prepare for the next activity or end of class.

7. Restroom Breaks, Lockers, Nurse etc.

- If you need to use the restroom, go to your locker or go to the nurse, please <u>DO NOT ASK</u>
 <u>TO LEAVE DURING THE FIRST 10 MINUTES OR THE LAST 10 MINUTES OF CLASS. That is a school policy.</u>
- Please ask respectfully during a break in instruction if you need to leave and you will be given permission; upon emergency only! Otherwise, please use the restroom before class!!!!
 Do NOT ask during instructions! Please raise your hand!
- PLEASE SIGN OUT ON THE SIGN OUT SHEET! Include your name, the time in and out, the date and your destination. Take my hall pass and leave quietly.
- When you return, return my hall pass and sign back in.
 - Any student gone for any lengthy period of time(up to the teachers discretion)
 will be considered cutting class and will be issued a cut slip along with further
 disciplinary action such as a detention etc.

8. Emergency Procedures

- Posted on the classroom walls are copies of the emergency procedures plans. The teacher will have a class copy of the emergency procedures and drills.
- The students will receive additional copy of laboratory safety procedures and rules.
- When exiting the building in an emergency, students are expected to remain orderly, quiet and respectful and transitioning to the classes safety zone.
- Students are to follow all school rules and expectations regarding emergency drills!

classroom rules, procedures etc.***

I have read the attached syllabus including all of the
classroom rules and procedures and the policy on cell phone usage. I understand what my responsibilities are as a students and will adhere to the policies to the best of my ability to ensure an environment that is conducive for learning for ALL students I am aware of the expectations of this course.
This receipt is to acknowledge that both the parents/guardians and the student has read the attached packet of information provided to us by Mrs. Prekrel. By signing below I signify my understanding of all the information listed above and as the parent/guardian, that my support is necessary for the success of my student in Biology this academic school year.
Student Name
Students Signature
Parent/Guardian Name

Parent/Guardian Signature		
Date:		