



Biology

Course Syllabus 2021-2022

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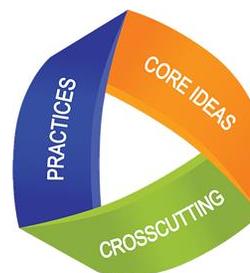
Course Description

Biology is the study of life. The major units of study in this course will focus on the characteristics and chemical basis of life, cells and systems, the processes and transformation of energy within these living systems, DNA and the inheritance of traits, evolution, the inter-relationships of cells, organs, systems, and organisms with each other and with the environment, and human impact on living systems and the environment. Throughout all of these units, we will reinforce the three dimensions of science learning: the Disciplinary Core Ideas, the Cross-cutting Concepts, and the Practices of Science.

Goals for Student Learning

Seven ***Cross-cutting Concepts*** will be stressed throughout the year:

- Patterns
- Cause and effect
- Scale, proportion, and quantity
- Systems and system models
- Energy and matter
- Structure and function
- Stability and change



These are interwoven with the ***Science and Engineering Practices***:

- Asking questions and defining problems
- Developing and using models
- Planning and carrying out investigations
- Analyzing and Interpreting Data
- Using mathematics and computational thinking
- Constructing explanations and designing solutions
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

The Science and Engineering Practices describe what scientists do to investigate the natural world and what engineers do to design and build systems. The practices better explain and extend what is meant by “inquiry” in science and the range of cognitive, social, and physical practices that it requires. Students engage in practices to build, deepen, and apply their knowledge of core ideas and crosscutting concepts.

Disciplinary Core Ideas of content are the **NGSS: Next Generation Science Standards** and can be found at the following link: <https://www.nextgenscience.org/overview-topics>

- Structure and Function
- Matter and Energy in Organisms and Ecosystems
- Interdependent Relationships in Ecosystems
- Inheritance and Variation of Traits
- Natural Selection and Evolution

Textbook and Materials

All students will use ***Biology*** by Prentice Hall. These will not be sent home with students.

- 1 to 1 ½ -inch three-ring binder with notebook paper (not spiral)
- three dividers for notebook sections: warmups, notes, classwork
- colored pencils (*suggested*)
- pens and pencils (*any color ink is fine as long as it is legible*)
- Headphones/earbuds
- **BRING NOTEBOOK TO CLASS EVERY DAY!** I will provide a storage space for your notebook in the classroom if you are afraid you will forget it ☺

Course Outline

- Biological Systems
 - How do systems respond to stimuli?
- Matter and Energy
 - How do the structures and processes of cells allow life to obtain energy, grow, and reproduce?
- Genetics
 - How does DNA, heredity, and the environment affect the development of offspring and future generations in a population?
- Evolution
 - How/why do favorable traits increase in a population to cause a population to evolve? What is the evidence to show relatedness in all life on earth?
- Ecology and Human Impact
 - What interactions between living and nonliving things have evolved within ecosystems?

HCPS Grading Policy

Examples of Product, Process, and Practice		
PRODUCT (50%) <i>Culminating Demonstration of Knowledge</i>	PROCESS (30%) <i>Addressing Specific Short-Term Learning Outcomes</i>	PRACTICE (20%) <i>Building Attitudes, Habits, and Skills</i>
Does it measure how well students achieved specific learning goals, standards, and/or competencies?	Does it provide feedback to students regarding growth towards the attainment of specific learning goals, standards and competencies?	Does it allow students to practice skills and/or reinforce content learning?

Examples of Product, Process, and Practice		
PRODUCT (50%) <i>Culminating Demonstration of Knowledge</i>	PROCESS (30%) <i>Addressing Specific Short-Term Learning Outcomes</i>	PRACTICE (20%) <i>Building Attitudes, Habits, and Skills</i>
Examples <ul style="list-style-type: none"> • Unit test/exam / project • Integrated performance assessment • Investigative analysis/lab report • Long-term project (unit/quarter) • Essay, full-process writing • Presentation-speaking/ written • Cognitive unit test 	Examples <ul style="list-style-type: none"> • Quizzes • Short, written responses to text/ CER • Research process • Short-term project • Resource evaluation • Collaboration to solve a problem • Self-guided exploration of a topic of interest • Evaluation of tools/resources 	Examples <ul style="list-style-type: none"> • Homework (Quizlets) • Notetaking • Every Pupil Response, e.g., exit questions/closure responses • Worksheets • Discussion boards/collaborative work • Classwork (e.g., graphic organizers, warm-ups) • Peer- and self-assessment

*These are possible examples of assignments- this list is subject to change at the teacher's discretion

** Extra credit will not be given for non-academic purposes.

Absent Work Policy

All assignments should be submitted on time. Students will be given the number of class periods equal to the number of lawful class periods absent to turn in completed make up assignments without penalty.

Late Work Policy

All assignments should be submitted on time in order to earn full credit. Any assignment, (*product, process, or practice*) will be allowed to be turned in late for one letter grade deduction from the grade a student earns on the assignment. In order to earn credit for late assignments, students must submit assignments by the end of the day on Wednesday (except for the last week of the quarter) following the designated HAC update. Students are only able to submit assignments that have an established due date within the grading window before the designated HAC update. Assignment that are turned in for late credit will be identified by a footnote in HAC to include a statement about the deduction of a letter grade due to the lateness of the assignment.

Grading Window	Designated HAC Update	Late Work Due Date
September 8- September 24	September 24	September 29

September 27- October 13	October 13	October 20
October 14- October 29	October 29	November 5 (Friday)
November 8- November 19	November 19	November 24
November 22- December 10	December 10	December 15
December 13- January 13	January 13	January 21 (Friday)
January 24- February 11	February 11	February 16
February 14- February 25	February 25	March 2
February 28- March 11	March 11	March 16
March 14- March 25	March 25	March 31 (Thursday)
April 1- April 22	April 22	April 27
April 25- May 6	May 6	May 11
May 11- May 20	May 20	May 25

Academic Integrity

Academic integrity is taking responsibility for the quality and completion of one's own work. Academic dishonesty is taking someone else's work and claiming it as one's own. Students at Bel Air High School are responsible for knowing what is considered to be Academic Dishonesty and the subsequent consequences. More information can be found in the BAHS Student Planner.

Classroom Rules and Procedures

Please review the document titled “*Creating the Most Successful Learning Experience*”

Cell Phone Policy

Students will place their electronic devices (including, but not limited to, cell phones, listening devices, smart watches, laptops, and iPads), either on silent or off, in a teacher designated area as they enter each classroom. Teachers will review with students the specific location for each room. The devices will remain in the teacher designated areas unless teachers explicitly tell students to use them as a part of classroom instruction.

- Devices will remain in the teacher designated area during bathroom visits.
- Devices will be retrieved from the teacher designated area at the end of the class at the direction of the teacher.
- School-appropriate cellphone use is permitted during class changes and lunch. Students are not permitted to make phone calls during school hours.
- Students will NOT be permitted to carry their electronic devices in a book bag throughout the school day.

If the electronic device policy is violated, the student shall then be subject to disciplinary action up to, and including, confiscation of the device as well as an office referral.

Syllabus Acknowledgment Form

This form is due on Monday, September 20, 2021.

SCHOOL: Bel Air HS
CLASS: Biology
INSTRUCTOR: Ms. Vega / Mr. Ackley
YEAR: 2021-2022

By signing this document, both the student and parent/guardian are attesting to have reviewed the following 3 documents:

- Class syllabus
- Safety Contract
- “Creating the Most Successful Learning Experience?”

PARENT / GUARDIAN NAME: _____

PARENT / GUARDIAN SIGNATURE: _____

STUDENT NAME: _____

STUDENT SIGNATURE: _____

DATE: _____

Parents and Guardians- do you prefer to communicate through telephone or email?

telephone _____

email _____

Is there anything special we can do to ensure the success of your student? (e.g. a seat close to the board, planner signing, etc..).
