

SILSA Course Syllabus

Course Name: Honors Biology

Teacher: Mr. Tucker Waldron (tucker.waldron@acsgmail.com) Room 104

Course Overview

This course introduces students to basic concepts in biology, including cells, genetics, evolution, ecology, microbiology, and classification. This course will encourage students to develop sound critical thinking skills with a focus on hands-on experiences, reading, and writing. Students will be challenged to be active, responsible participants in their education. To provide a positive learning environment, students will be expected to follow school and classroom rules and procedures. Expectations are high, both academically and socially, for every student.

Essential Questions to Spark Student Inquiry

Unit 1 Introduction to Biology: What are the foundational concepts of Biology?	Unit 6 DNA and RNA: What are genetics and how do they determine living things' physical forms?
Unit 2 Biomolecules: What are the building blocks of life?	Unit 7 Mitosis + Meiosis: How do cells replicate?
Unit 3 Cells: What are cells made of?	Unit 8 Classification: How is life organized?
Unit 4 Transport: How do nutrients move through living things?	Unit 9 Evolution + Ecology: How do living things change and interact over time?

Unit 5 Energy: How do living things process energy?

Assessment

Formative

Ongoing formative assessments to check for student learning, work completion, and class participation will be conducted on a daily basis. These formative assessments include: text annotations and discussions, video questionnaires, notes, and lab activities.

Summative

The course consists of nine units as outlined above. Students will complete a summative exam or project at the completion of each unit. The summative exams will consist of multiple choice and open-ended questions.

At the end of the course, all students are required to take the Biology End of Course (EOC) Exam. This is a cumulative exam that tests the knowledge from all standards as described by the NCPDI Biology Standard Course of Study. The EOC is worth 20% of the student's final grade.

Grading

Grades are based on the point system. Students' grades are a percentage of the available points that they have earned. **The final Biology EOC ("End-Of-Course") test is worth 20% of the final grade.**

- Point breakdown per quarter (approximation):
 - o 200 points per quarter
 - 50% Classwork (10 points)
 - 10 classwork assignments per quarter
 - 25-30% Test/Project (30 points)
 - 1-2 Tests/projects per quarter
 - 20-25% Quizzes/Labs/Small Projects (20 points)
 - 2 Labs/small projects per quarter

Students will have opportunities during Q1, Q2, and Q3 to earn additional points towards tests by demonstrating proactive study habits and completing post-test corrections for credit on each question missed or in some cases, students may have reassessment opportunities.

For non-test assignments, students will receive feedback via Canvas or in written or oral communication from the teacher. Opportunities for resubmission following review of feedback will be clearly communicated by the teacher.

<u>Formative Work</u> (Classwork/Small Projects): Must be submitted within the unit. If it's missing after the unit ends, it's a "Not Yet," but doesn't heavily impact the grade.

<u>Summative Work</u> (Labs/Major Projects): Must be turned in by the due date to receive feedback and revision opportunities. If it's late, students schedule a check-in and submit within a two-week window.

Work not submitted by the window = "Not Yet Attempted" (0), but can still be attempted before the end of quarter with teacher approval.

Attendance

Per Board of Education Procedure 3420-P: Students who exceed the number of absences to earn course credit must attend attendance recovery within two weeks of their last absence.

Per <u>Board of Education Procedure 4400-P</u>: To receive credit for a course, a student must not have more than five (5) unlawful class absences.

When a student must miss school, a written excuse signed by a parent or guardian must be presented to the student's teacher on the day the student returns after an absence. Absences due to extended illnesses may also require a statement from a health care practitioner.

Additional/Supplemental Information

I have two philosophies for my classroom, inspired by the writing of Sonya Renee Taylor. These philosophies permeate every aspect of the class and help inform an open minded approach to science, and learning more broadly:

- 1) Not knowing is an opportunity for exploration without judgment.
 - a) Your worth as a person is not tied to what you already know or even what you will know. There is a constant opportunity for all of us to learn more and we all have something to teach each other.

- 2) Truth (and science) is constantly emerging from a complex process of mutual inquiry.
 - a) As a class we will ask questions together and together we will find the answers. Although it can seem concrete, science is constantly evolving as our understanding of the subject at hand changes. The more questions we ask, the more precise our comprehension can be.