Biology

Irondale High School

2023 - 2024

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Course Description:
This is an introductory course designed to teach the process of science as it applies to biology today. This course studies the basic principles governing all living things. Topics in biology that will be covered include the nature of science, ecology, cellular biology, heredity, evolution and human body systems.

Learner Outcomes:

- *Understand that scientists conduct investigations for a variety of reasons, including: to discover new aspects of the natural world, to explain observed phenomena, to test the conclusions of prior investigations, or to test the predictions of current theories.*
- *Formulate a testable hypothesis, design and conduct an experiment to test the hypothesis, analyze the data, consider alternative explanations and draw conclusions supported by evidence from the investigation.*
- *Describe how the functions of individual organ systems are integrated to maintain homeostasis in an organism.*
- *Explain the function and importance of cell organelles for prokaryotic and/or eukaryotic cells as related to the basic cell processes of respiration, photosynthesis, protein synthesis and cell reproduction.*
- *Explain how matter and energy is transformed and transferred among organisms in an ecosystem, and how energy is dissipated as heat into the environment.*
- *In the context of a monohybrid cross, apply the terms phenotype, genotype, allele, homozygous and heterozygous.*
- *Describe the process of DNA replication and the role of DNA and RNA in assembling protein molecules.*
- *Use the processes of mitosis and meiosis to explain the advantages and disadvantages of asexual and sexual reproduction.*
- *Use scientific evidence, including the fossil record, homologous structures, and genetic and/or biochemical similarities, to show evolutionary relationships among species.*

- *Explain how competition for finite resources and the changing environment promotes natural selection on offspring survival, depending on whether the offspring have characteristics that are advantageous or disadvantageous in the new environment.*
- *Describe the social, economic and ecological risks and benefits of changing a natural ecosystem as a result of human activity. For example: Changing the temperature or composition of water, air or soil; altering populations and communities; developing artificial ecosystems; or changing the use of land or water.*

Required Materials: Pencil, SCIENCE ONLY notebook and folder or binder with note paper, intro biology textbook (Miller and Levine, Biology)

Classroom Policies:
Late work: All late work for a unit will be due at the beginning of the hour on the day ***before*** the test for that unit. Late work **will not be accepted** after this deadline, and will be marked in the gradebook as expired.

Phones/Headphones/Wearable Technology: Phones are not necessary in the biology classroom. If they are brought to class, students will have the option to keep it out of sight or turn it in at the beginning of the class period and have it stored securely for the entire class period. Headphones and AirPods also need to be stored out of sight and not be worn at any point during class. Wearable technology, such as an Apple Watch, must be turned to school or airplane mode. See the incident chart below for the actions that will be taken if these items are seen or used during class.

NOTE: *At no time are students to record pictures or videos of students or adults without consent. The use of a personal electronic device or any device capable of taking photographs and videos is not allowed in restrooms. These devices include, but are not limited to: cell phones, cameras, Chromebooks, and other such technology.*

INCIDENT	TEACHER ACTIONS	SSC/DEAN/ADMIN ACTIONS
1st Incident	[1] Warning: teacher redirection to class or individuals. [2] 1:1 Conversation with Student [3] Communication with Family.	
2nd Incident	[1] Warning: teacher redirection [2] Store device for remainder of period [3] Communication with Family.	**If a student refuses teacher storage,** [1] referral to SSC [2] SSC/Admin: device stored until end of the day. [2] Dean + Student make a success plan.
3rd Incident	[1] Warning: teacher redirection [2] Referral to Administrator.	Admin: Parent/Guardian to pick-up of device & attend student/parent/admin meeting.

Absences:
Absences should not affect learning. You are responsible for checking the calendar on your teacher's website to find what you have missed. In this mastery based classroom you are expected to pick up the material where you left off on the unit pacing guide.

- If you were absent on the test review day you are *still responsible* to ***take the test on the day of the test***.
- If you were absent on the day of a quiz, you must make up the quiz the ***same day*** you get back during class.
- If you were absent on the day of a test, you will take the test the ***same day*** you get back during class.
- If you were absent on a lab day, you have ***until the day before the test*** to finish the lab work and turn it in. Please check with your teacher on how to make it up.
- If you were absent on the day homework is ***checked***, you must turn in the assignment the ***same day*** you get back during class.
- If you were absent on the day homework was ***assigned***, you must turn in the assignment on the ***following day***.

Attendance:
Excused and unapproved absences will not arbitrarily result in reduction in grades, but failure to complete work will usually affect grades. Unexcused absences on test days will forfeit the students ability to retake the unit test missed due to this unexcused absence. Students and/or parents or guardians are responsible for requesting make-up work for each day's absence. Students will be allowed two school days make-up time for each day of excused absence, with the exception of long-term assignments of 10 or more school days. Long-term assignments will be due the day the student returns to school. These times may be extended at the discretion of the teacher. Students will be allowed one day to make up work in the case of unapproved absences. Teachers are responsible for providing assignments after a student or parent/guardian request.

LAWFULLY EXCUSED ABSENCES & TARDIES to SCHOOL	UNEXCUSED ABSENCES & TARDIES to SCHOOL
Sickness - too sick to be in school	Overslept / Family Vacation / Traveling
Medical & Dental Appointments	Missed school bus/Suspended from school bus
Religious Holidays & College Visits (w/parent approval)	Staying home to babysit
Extreme Family Emergency (home fire, death, etc).	Weather too hot/cold

Tardies:
Teachers will follow the tardies policy outlined in the Irondale Student Handbook

First Event	Warning with student + documented in Synergy and "Hallway Spreadsheet."
Second Event	Warning letter sent home to parent/guardian + absence/tardy documented in Synergy.
Third Event	Warning letter sent home along with a "No Passes for a Week" notice. Documentation in Synergy.
4th or More	Phone communication with student and parent/guardian, "No Passes for a Week," attendance contract. Students may also not be able to participate in after school activities for a week. Documentation in Synergy.
5th or More	Student and Parent/Guardian meeting with Administrator.

*Grace will be given at the beginning of every semester.

Academic Honesty:
Mounds View School Board Policy EG-3109 Student Rights and Responsibilities:
Academic honesty is required to ensure an accurate measurement of a student's academic knowledge. The Mounds View School Board expects that students will achieve success with integrity. Academic dishonesty impairs a true showing of academic achievement. Substantiated reports of academic dishonesty will result in appropriate consequences as defined in accompanying regulations and in student handbooks. Examples of academic dishonesty include, but are not limited to: theft and use of tests; use of crib sheets or other cheating devices on an exam; plagiarism or representation of a substantial piece of work as one's own without proper attribution. This policy applies to all manner, including the most current technological advances, systems, or equipment, that may be utilized for the purposes of academic dishonesty.

Academic dishonesty will be considered a behavioral infraction. The following guidelines will be utilized when a violation of academic honesty occurs:

- Consequences will be commensurate with the severity of the incident

- Consequences cannot prevent growth and development or an accurate measurement of student achievement
- Measures will be sought to determine why the academic dishonesty occurred
- Students will be required to provide a written explanation of behavior
- Students in violation of this policy will not escape the performance indicator; student knowledge will still be measured within an agreed timeframe set by teacher, dean, and student
- Additional consequences may include:
    - Re-examination of content; repeat of project, paper, or activity
    - Possible reduced score/grade not to prevent achieving a level of proficiency
    - Other measures identified in Mounds View School Board Policy EG-3109: Student Rights and Responsibilities
    - Multiple offenses may result in loss of credit, to be determined by building principal

(Irondale Student Handbook).

Grading Scale:

- In this course, we use equal interval grading to assess student progress.
- The purpose of the equal interval scale is to encourage proficiency rather than the accumulation of points and to support student growth over the course of the semester.
- Students and parents are encouraged to communicate with teachers if current progress does not seem adequate; we can then work together to find strategies to improve proficiency.

Individual Assignment Grade Configuration		
Gradebook Entry	**Description**	**Point Value**
A	Went beyond the basic requirements for proficiency	4
B	Met all the basic requirements for proficiency.	3
C	Met some basic requirements for proficiency	2
D	Met very few basic requirements for proficiency.	1
I	Didn't show enough work to demonstrate proficiency	0
M	Missing Evidence of Proficiency	0
XP	Assignment is expired	0

Final Grade Configuration		
A	**3.60**	**4.00**
A-	**3.20**	**3.59**
B+	**3.01**	**3.19**
B	**2.59**	**3.00**
B-	**2.40**	**2.58**
C+	**2.21**	**2.39**

C	**1.79**	**2.20**
C-	**1.60**	**1.78**
D+	**1.41**	**1.59**
D	**0.99**	**1.40**
D-	**0.80**	**0.98**
I	**No Value Assigned**	

*Note: Regardless of the final mathematical calculation, students who do not complete required assessments will receive a final grade of **I** (recovered in summer school, or through after-school credit recovery programming) or **NG** (recovered with the classroom teacher within three weeks of the semester's end).*

Gradebook Setup:

Introduction to Biology

Practice (Learning Checks based on Daily Work and Labs)	15%
Performance (Unit Tests and Projects)	85%

Accessing Grades:

Parents can access grades through ParentVUE. Parents will be able to see assignments for each class, and the assignments may have a score or a code (or both). Assignments may also include written comments from the teacher.

Mi = Missing (the assignment is missing and is currently counting as a score of zero)
Ab = Absent (the student was absent when the assignment was given or due)
La = Late (the assignment was turned in late)
Inc = Incomplete (the turned in assignment was not complete)
TI = Turned in (the assignment is turned in but does not yet have a score)
WIP = Work in progress (the student is working on the assignment and although it is not completed, it is not missing--this is often used for projects that have multiple parts)
XP = Assignment is expired and credit may not be earned. The assignment counts as a score of zero.

Relearning Opportunities:

Performance Assessments: Students who do not earn an "A" on specific unit benchmarks on the performance assessment will need to have the unit review completed and will have the opportunity to relearn the material through remediation activities to earn full credit on each learning benchmark. Relearning must be completed in order for students to be eligible to retake benchmark(s) of the performance unit test. All retakes must be completed on the assigned date(s) as outlined by the teacher. Any student who has an unexcused absence the day of the original test will be ineligible for retaking the unit exam that they were absent for.