



Biology 2023-2024

Class and Contact Information



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Room 205

Course Overview:

This course welcomes you to high school science by taking familiar scientific concepts and extending the depth of analysis to prepare you for upper level science courses. You will use inquiry investigations and model building to make observations, predictions, and models of understanding. This very rich experience will call on you to write, read, think on your own, create projects, speak in front of the class, work in lab groups, work alone, and discuss and debate in teams. You are going to enjoy science class, but we are going to do a lot of work!

Course Topics:

Topic	Description
Cells	Cell structure and function; organelles; plant cells vs animal cells; How does a cells structure allow it to function?
Metabolism & Energy	Cell transportation methods; Photosynthesis and Cellular Respiration; Energy Pyramids and Food Webs; How does energy move through an cell and ecosystem?
DNA & RNA	Base Pairing; Transcription and Translation; Mutations; How is our genetic information stored and transmitted?
Genetics	Mendelian Genetics; Inheritance Patterns; Pedigrees; How do we inherit and express our traits?
Ecology	Parts of an Ecosystem; Energy & Chemical Cycles; Predator/Prey Interactions; Competition & Relationships; How do organisms within the same ecosystems interact?
Evolution	Mechanisms of Evolution; Evidences of Evolution; Cladograms; How did evolution happen and what evidence do we have to support this?

NOTE: *This may change in order and in content to best meet the needs of the class!*

Required Materials

- Chromebook
- Notebook or Binder
- Chromebook Charger
- Pen or Pencil/Eraser

Grading:

Students will be evaluated using a **variety of assessment techniques**, including tests, quizzes, lab assignments, readings, projects, and homework. At the beginning of each unit, you will receive a packet. This packet will include guided note pages, activities, and labs. Packets will be turned in for a grade at the end of each unit. Notes, Labs, and assignments will be worth 30% of your grade and quizzes, tests, and projects will make up 70%.

Type	Description
Notes	Guided note pages will be provided in your packet. This will be graded based on completion. PowerPoints and other materials will be posted on Schoology after class each day.
Lab/Activities	Labs/Activities will be graded based on class participation and completion of worksheet.
Assignments	Additional worksheets will be given to help continue practice skills centered around the topic of the week. Graded on completion and accuracy.
Quizzes/Tests & Projects	Quizzes will be used to check understanding during the unit. Packets may be used on quizzes, but not on unit tests.

Late Work:

- I will accept late work up until 2 weeks after the due date OR the end of the unit.
- Any labs or activities missed during class time can be made up, but it is your responsibility to ask for this!

Absences From Class:

- If a student misses a class, it is **their own responsibility** to check Schoology or ask a classmate for notes or activities and complete them. I can always be reached by email with any questions!
- Extensions may be given if a student provides a valid reason or other form of communication the day they return to school.

Cellphones & Headphones:

- While I do not ban cellphones or headphones in class, it is expected that you will be on task and working.
- If this becomes an issue or distraction for whatever reason, you may be asked to put it away or leave it on my desk for the class period.
- I will trust you to use cellphones & headphones appropriately until you show me that you cannot handle this responsibility.
- Cellphones are never allowed to be out during a test or a quiz. Any student using a phone during a test will receive an automatic zero.

Class Expectations:

- **BE RESPECTFUL** -- Respect the needs of everyone, from your best friend to your arch nemesis, as learners and people. You should be able to work with anyone in the classroom and not block their learning.
- **BE SAFE** -- Everyone should feel and be safe physically, mentally, and emotionally. Mind the things you do and say.
- **BE HELPFUL** -- "Helping your classmates is the highest form of scholar-ship." We are in this together, so help a classmate out.
- **LISTEN** -- Listen carefully. Not only is it respectful and important to safety, but you can learn something and help others. You get a little smarter too!
- Students will be asked to take a break if they are having a hard time working with these rules. Repeated offenses will result in a referral to administration and a phone call home.