

Biology

Instructor: Mrs. Ashley Griffith

E-mail: agriffith@eriesd.org

Room: G-221

Extra Help: Tuesday from 3:50 - 4:20 pm or by Appointment



Course Description:

The students will explore and engage in the study of life from the molecular level to the organismal level. Students will investigate living things and their interactions with other organisms in order to obtain a better understanding and appreciation of life on earth. Topics include cell biology, biological molecules, photosynthesis, cellular respiration, genetics, and evolution.

Texts: ebook: Inspire Biology by McGraw Hill accessed through Clever.

Academic Expectations:

Students are expected to do their own work and meet specific requirements given for assignments and assessments. All work will be posted on Schoology as well as explained in class. Cheating, including plagiarism, will not be tolerated and will result in no credit as well as possible consequences.

Classroom Expectations:

- Be quietly seated and working on the “Do Now” when the bell rings.
- Have a charged Chromebook.
- Dressed in proper clothing following the student dress code.
- All items not required for class must be placed in a backpack or off to the side (cell phones away and silent).

Behavioral Expectations:

Students are expected to be Respectful, Responsible, and Resilient. Failure to do so will result in consequences following the School Wide Behavioral Continuum (warning - warning - teacher detention- referral).

Evaluation:

Student grades will be recorded in Infinite Campus regularly. Student grades are based on the overall percentage of points:

Classwork: 50% Assessments: 40% Homework: 10%

Late work will result in a deduction of 25% each day it is late. If a student is absent they must contact me to make up any missing work. The absence must be legally excused, and made up in a timely manner, to earn points. If a student is absent the day of an assessment they must schedule a time to make up that assessment within one week of their absence.

Use of Technology:

- Chromebooks should only be used to complete classwork.
- Cell phones should be away and silent during the class period.
- You may bring earbuds to use with video assignments and independent work, however you should not be wearing them during group instruction or activities.

PBIS:

PBIS points will be awarded for meeting expectations such as arriving to class on time, completing academic tasks, and keeping cell phones away and silent. Extra points may also be awarded for going above and beyond expectations given.

BIOLOGY UNITS: (May not go in exact order!)

1. Introduction to Biology:
 - a. Characteristics of Living Things
 - b. Nature of Science
2. Basic Biology:
 - a. Cells (Prokaryotic vs Eukaryotic)
 - b. Structure and Function Relationships
3. Chemistry in Biology:
 - a. Water and Carbon
 - b. Monomers/Molecules to Polymers/Macromolecules
 - c. Enzymes
4. Cellular Transport:
 - a. Homeostasis and Transport
 - b. Biological Balance (“sameness”)
5. Bioenergetics:
 - a. Cellular Respiration and ATP
 - b. Photosynthesis and ATP
6. Cell Growth and DNA Processes:
 - a. Mitosis and Meiosis
 - b. DNA Replication
 - c. Protein Synthesis
7. Genetics:
 - a. Mendelian Genetics
 - b. Mutations
 - c. Biotechnology