

Course Description:

Welcome to Specialized Science 12. This is a science class that explores big ideas and concepts in science that have an effect on the world around you. We will be researching current topics of science and interacting with each other in discussion and projects to help us understand these effects in more depth.

Here are the **BIG IDEAS** we have the opportunity to explore

Biodiversity is dependent on the complex interactions and processes between biotic and abiotic factors. (adapted from Environmental Science 11)	Climate change impacts biodiversity and ecosystem health. (adapted from Environmental Science 12)	All members of a species have common characteristics that evolve over time. (adapted from Life Sciences 11)	Our evolving understanding of genetics has implications for health, society, and environment. (adapted from Anatomy and Physiology 12)	Chemical reactions are due to energy changes that result from the breaking and re-formation of bonds. (adapted from Chemistry 11)
Changes in equilibrium drive chemical processes. (adapted from Chemistry 12)	Energy is always conserved. (adapted from Physics 11)	Forces interact within fields and cause linear and circular motions. (adapted from Physics 12)	Geologic materials can change as they cycle through the geosphere and can be used as resources. (adapted from Earth Sciences 11)	Rock layers and the fossil record reflect geologic changes through time. (adapted from Geology 12)

The Process:

- As a class, we are going to pick (3) of the Big Ideas above from (2) different subjects.
- We will gather vocabulary that is important to learn about each topic
- We will create either presentations and/or debates about these topics

Grading:

Vocabulary: **10%** Presentations/ Debates: **50%** Participation: **40%**

Attendance:

Unfortunately, if you are not attending class, it is difficult to earn participation marks. Some of the assessments are “team-based” so you can put your team in jeopardy if you don’t show up on the day of the assessment. Of course, you will always know the dates of the assessments well in advance so you can alter your schedule around them.

Classroom demeanor:

Not being respectful towards others eliminates a certain number of your Participation Marks