



Yearly Overview Grade 8 Adv. Science

2020-2021

Semester 1

Term 1

- Lab Safety/Back to School/Canvas Intro
- Properties of Matter/Nature of Science
- Periodic Table
- Atomic Structure & Valence Electrons
- Chemical Reactions
- Formulas & Equations
- Bonding
- Law of Conservation of Mass

Term 2

- Rotation – Day/Night
- Revolution – Seasons
- Lunar Cycle & Tides
- Characteristics of the Universe
- Star Formation & HR Diagram
- Electromagnetic Spectrum
- Origin of the Universe – Universe Age

Semester 2

Term 3

- Balanced & Unbalanced Forces
- Newton's Laws of Motion
- Speed, Velocity, Acceleration
- Motion Graphs & Real Time Data
- Plate Tectonic Theory
- Plate Tectonics & Crustal Features
- Topography & Satellite Images
- Sun's Energy - Thermal Energy & Currents
- Climatic Interactions & Weather Maps

Term 4

- Relationships within Ecosystems
- Biotic/Abiotic Factors & Competition
- Effect of Short/Long-term Environmental Changes
- Human Impact/Dependence on the Environment
- STAAR Countdown