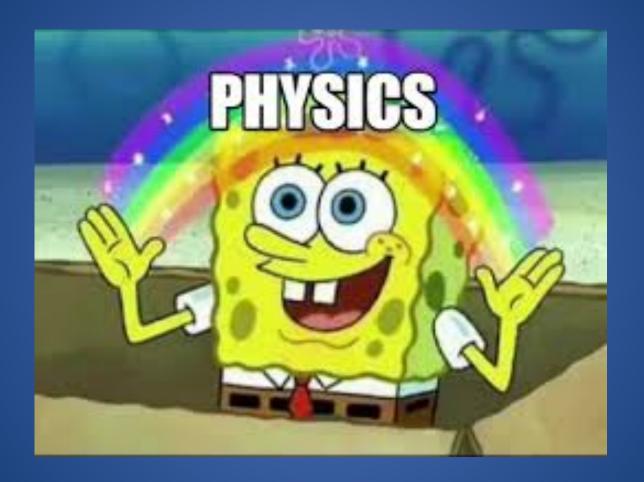
# CHS Science Program

Brad Buck (Dept. Co-Chair) - bradfordbuck@claytonschools.net Rob Laux (Dept. Co-Chair) - robertlaux@claytonschools.net



## !!Freshman!!



Honors Physics, Physics, and Foundations of Physics

# All Physics Classes

- Form the foundation for understanding all science
  - Design lab experiences
  - Gather data
  - Graph data to determine relationships between variables
  - Verbally present findings to class
  - Develop models to explain data expressed verbally, symbolically, graphically and algebraically.
  - Focus is on energy and the mechanics of motion under the influence of a gravitational field.

#### Considerations

- Standardized Test Scores WMS %iles
  - In literacy: Reading
  - In math: NWEA
- 9th Grade Math Course Placement
- 8th Grade Science scores
- Science Reasoning Test

## Recommendations (con't)

- 8th Grade Teacher Considerations
  - Study Skills and Tenacity
  - Independence and Comfort with Deferred Closure
  - Curiosity and Problem Solving
- Discussions with 8<sup>th</sup> grade team, 9<sup>th</sup> grade teachers, Science Curriculum Coordinator and CHS department chair.
- Placement important for success and maximized learning.

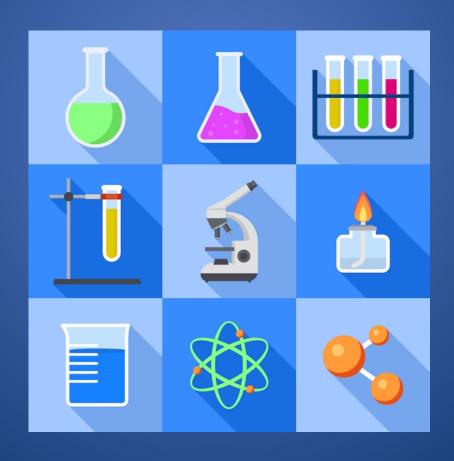
#### 9th Grade Elective

- Elective: Principles of Biomedical Science
  - Integrated Biology, Chemistry, and Medicine
  - Ongoing case studies/scenarios
  - Laboratory Investigations and Project Based Curriculum



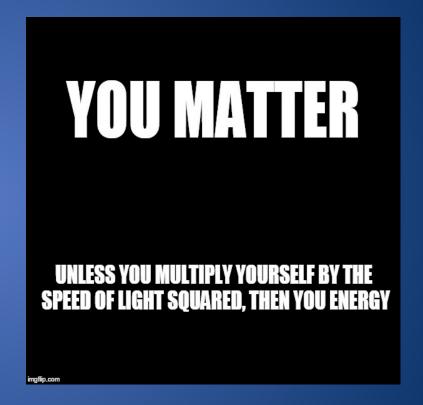
# Sophomore Year: Chemistry

Honors Chemistry, Chemistry, and Foundations of Chemistry



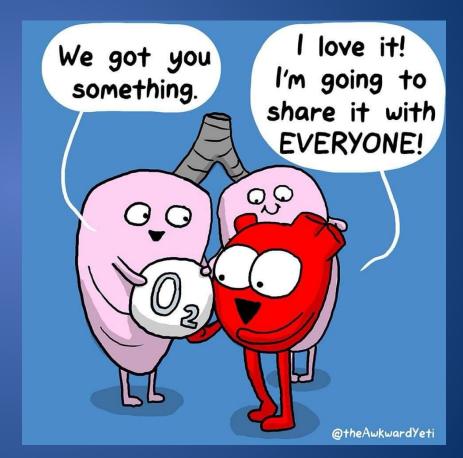
# Chemistry

- Focus on the interactions of charged particles (protons and electrons) under the influence of electromagnetic fields.
   Aka more physics!
- Forms the foundation for understanding Biology



# Sophomore Elective

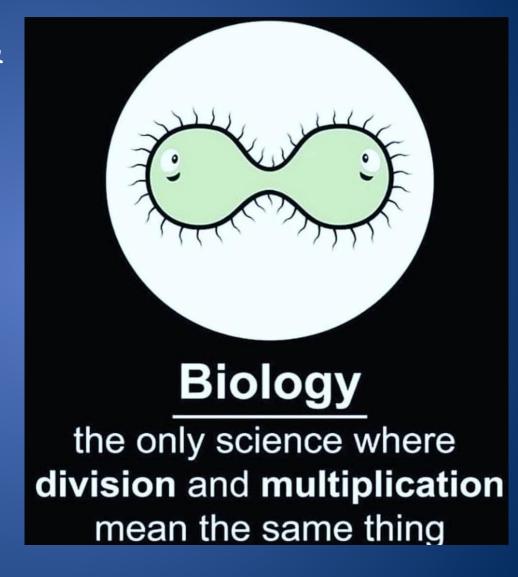
- If students have taken
   Principles of Biomed
   Science, they can take
   Human Body Systems
   (Anatomy & Physiology)
   in 10th grade.
- Explore human anatomy, body systems and disease through dissection, labs and model-building.



## Junior Year

#### • CORE:

- Biology: Chemistry & Physics applied to Life
- Honors Biology,
   Biology, Foundations
   of biology
- Learn about living systems at the ecosystem, organismal, cellular, and molecular level



# Junior and Senior Year So many cool science options

 Students have the opportunity to take electives in which they have the most interest.

#### AP Electives

- Physics 1 and 2
- Chemistry
- Biology
- Environmental Science

#### Semester Electives

- Solar System/Cosmology
- Anatomy & Physiology
- Forensic Science
- Plant Science 1 and 2
- And many more!



#### **PLTW Biomed Courses**

- Principles of Biomedical Science
- Human Body Systems
- Medical Interventions
- Biomedical Innovations

# Thank you for your attention!



### Senior Year

 Students have the opportunity to take electives in which they have the most interest.



