



Reynolds High School  
*Building Relationships for Academic Success*

## Biology 2024-2025

Instructor: Dr. Jeffrey Grant Heikes PHD, MD, JD  
Room#: 210



Phone#: 503-667-3186 x1370  
Email: [jheikes@rsd7.net](mailto:jheikes@rsd7.net)

### Required Materials:

Planner, Paper, Notebooks, Writing Utensils, things to entertain yourself. You know, books, crayons, sketch books, comics, graphic novels, etc...

### Course Description:

Welcome! This course has been developed as an introduction to basic Biology concepts.

Biology is the science of understanding how LIFE works in this Universe! From DNA to digesting food, scientists understand how we work! The story of how we learned about these things is amazing! Below is an outline of the topics that we will cover throughout the year:

### Course Calendar (\*subject to change!)

| Unit                       | Topics  |
|----------------------------|---|
| Classification and origins | Origins of life, characteristics of life, and classification of life  |
| Cell Structure             | Endosymbiotic theory, prokaryotes vs. eukaryotes, cell organelles   |
| Cell Energy                | Photosynthesis and cellular respiration   |
| Cell Transport             | Structure of phospholipid bi-layer, passive vs. active transport  |
| Cell Division              | DNA structure and replication, mitosis  |
| DNA and Gene Expression    | Protein synthesis, genetic engineering  |
| Genetics                   | Mendelian genetics, Punnett squares, modern genetics, pedigrees   |
| Evolution and Ecology      | Natural selection, predator/prey relationships, biodiversity, ecosystem interdependence, evidence for evolution |

### Project Based Learning

Science is all about answering questions, discovering truths and describing natural phenomenon through experimentation. We will do as many projects as we can. However; reading, writing, testing, studying, speaking, note taking and group learning are also important. Students will be asked to think critically and describe their learning. Depending on the project there will be a mix of group and individual works.

### Grading Policy Description

- **Mastery assignments** 70% of grade - Tests, Quizzes, and major projects or major labs
- **Classwork assignments** 30% of grade – Labs, homework, small activities, warm ups
- **More on Grading:** Scores for all assignments and assessments are “translated” into a 10-point scale. i.e. a 93% is entered as 9.3 points.

| Grade % | Letter | Description             |
|---------|--------|-------------------------|
| 90-100  | A      | Advanced Mastery        |
| 80-89   | B      | Meets, is Proficient    |
| 70-79   | C      | Approaching Proficiency |
| 60-69   | D      | Not Enough Evidence     |
| < 60    | F      | No Evidence             |

### **Absences and Late Work:** *Listen, you can NOT learn if you are NOT here!*

- You will be required to make up any missed work. You may need to come in after school at times to make up lab work or do a test or retake a quiz.
- Many of your materials will be available on Schoology so you can access them outside of class if needed.
- There will be suggested Due Dates to keep you on pace, but there will also be **Hard Deadlines** at the end of each unit. If you miss a **Hard Deadline**, you will need to talk to Heikes about how and if you can make up this work. Not all work will be available after a **Hard Deadline**!

### **Class Expectations**

- **Cell Phone / Headphone policy:** Cell phones are having an **EXTREMELY DETRIMENTAL** effect on our student's ability to focus and learn. This is **NO JOKE**. As per school policy, cell phones must be **OFF and AWAY** during class. No exceptions.
- Treat everyone in class respectfully; no bigotry of any kind will be tolerated! Show respect for yourself by showing it to your classmates, your teachers, and all deserving members of our community.
- Be in your seat and ready to work when the bell rings or be TARDY. Tardy policy will be followed.
- Use language and tone of voice that is appropriate for the classroom.
- Please, **no food or drinks in class** except for water bottles... with occasional exceptions.
- **Ask questions!** It's cool to be curious! People who aren't curious are bored and being bored is boring. Ask questions and demand answers that make sense to you!

**Consequences:** You can **choose** to abide by these expectations and have a great year or choose a more difficult path that leads to **verbal reminders, calls home, detention, parent/student/teacher conference, and/or referrals.**



### *All Raiders strive for....* **POWER**

- **Prepared and Punctual**
  - Raiders come to class on time and with all required materials
- **Organized**
  - Raiders keep their science materials in the science section of their binder.
  - Raiders will write down the daily agenda and important dates in their planner.
- **Writers**
  - Raiders write and put forth their best authentic work daily.
  - Raiders do not plagiarize and copy. Copied work will not receive credit for all parties involved.
- **Engaged**
  - Raiders are focused in class 100% of the time.
  - Raiders put away all electronics and other distracting items during class time.
- **Respectful**
  - Raiders respect each other as well as the space and property they occupy
  - Raiders are always respectful and safe during laboratory work.
  - Raiders will respect the room by helping to keep it clean. No food or open drink containers in the classroom.

\* Just joking, I'm not a doctor.

