

**Grade 9 Biology**

Jefferson High School

**Teacher:** Michael Napoli **Location:** Rm D8. **E-mail:** mnapoli@pps.net

 **Phone:** (503) 916-5180 ext. 78546

**Course Description:**

Biology is the study of life! This course covers the nature of science and inquiry, currently accepted theories, global ecology, bioethical decision making and current biological issues. Whenever possible these threads will be woven through the basic biological topics in the curriculum including: the nature of science, inquiry, cell biology, ecology and environmental issues, evolution, taxonomy and diversity, biochemistry, nutrition, cellular respiration and photosynthesis, cell division, nucleic acid replication, and genetics. Interesting learning activities will stimulate comprehension, retention and a sense of value for the topics studied. Concept-oriented, hands-on learning activities will be used whenever possible. Cooperative team-work is a major component of this course. Coursework will be planned to insure that every student reaches or exceeds PPS and Oregon State Standards.

**Materials Needed**

Three Ring Binder

Writing utensils

**Resources**

**Textbooks:** *Holt Biology*. Orlando, FL: Holt, Rhinehart and Winston, 2008. Print.

 *Biology: Concepts and Connections,*

**Google Classroom**: Each class is given a code and the course calendar with important due dates, along with course documents and information can be found here for support, review, and current class news.

**Assessment and Grading:**

 A student’s grade is based on a point system. Assignments with higher point values will influence the final grade more than assignments with lower point values. To help organize student work, the categories below will be used. Each category has an approximate percentage toward a student’s overall grade.

* **~50% Topic Assessments** (These include, but are not limited to, tests, quizzes, projects, labs extended response questions)
* **~35%Formative Assessments** (These include, but are not limited to, warmups, in-class assignments, quizzes, personal responses, and homework),
* **~15% Binders**

 Binders will be a very important part of the class this semester. Your binder will serve as the place to take notes, complete warm-ups and store all assignments and handouts. Every assignment and handout will be numbered on the top right hand side of each paper and placed in a three ring binder.

 Binders will be collected at the end of the semester for a grade. The grade will be calculated based on each handout and assignment being numbered, in proper order, and properly finished. Any unfinished or improperly completed assignments will decrease the binder grade. Answers for all assignments must be in complete sentences. Math worksheets and answers will be the only exception to this rule.

\*Quizzes are given with and without notice based on relevant coursework.

### \*Writing is an essential skill that is needed in all disciplines. For this reason, every assignment will be graded on the quality of writing along with the content of the assignment. 10% of the total points for each assignment will be associated with the quality of writing: proper conventions, punctuation, capitalization, and spelling.

**Grade Scale:**

A=90-100%

B=80-89%

C=70-79%

D=69-60%

F=59% or lower

**Plagiarism**: It is expected that all work submitted reflects **your own** thinking or is properly referenced. It is unethical to use someone’s ideas (whether a friend’s or a published author’s) and receive credit for them. Deliberate plagiarism will result in a mark of zero.

**Behavior Expectations:**

As a learning community, we want to make sure that all students have the ability to be successful. As a result, the following behavior norms will be heavily reinforced throughout the school year:

* Respect Air Time.
* Stay Focused.
* Respectfully Help Others Stay Focused.
* Own it, Fix it, and Move on.
* Use respectful language.
* All students are required to actively engage in the learning environment of the class. This means students should be asking questions, completing assignments, and working efficiently in groups.
* No food in the class EVER.
* Water bottles with lids that seal can be used on days without labs.
* No headphones visible or audible unless otherwise stated.

**Attendance and Lateness**

You are expected to arrive to class on time and ready to participate every day. In the event you are late, quietly enter the classroom. Students are to begin working upon entering the class. Excessive lateness will be documented and begin a collaborative disciplinary process.

**Absence**

When you are absent visit google classroom to see what assignments were missed. You are responsible for submitting any missed assignments in a timely manner.

**Electronic Devices**

Cellphone and electronic devices are permitted for educational use only. Using devices for non-academic reasons and charging phones in the classroom are never permitted.

**Late Work Policy:**  No assignments will be accepted late. The only expectations will be for topic assessments which will be accepted but will incur a 10 point grade reduction for every day the assignments is late. Students can also ask for an extension on assignments, if necessary. This option has to be completed via email and only used for emergency situations.

### Rewards:

Academic champions will be recognized as the winners of review games.  An academic champion will be awarded one or all of the following privileges for one week: use of headphones and/or work in a group of two during independent work time.  After being awarded the academic champion title, champions are awarded a trophy that is to be displayed for the week.  For an academic champion to take advantage of his/her privileges, they must display the trophy on their desk.  An academic champion's privileges will last for one week

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| **Course Content** |
| **Semester 1:**  Unit 0: Nature of Science * The Science of Biology
* Scientific Investigations

Unit 1: Ecology * The Biosphere
* Ecosystems and Communities
* Populations
* Humans in the Biosphere

Unit 2: Biochemistry * Water
* Macromolecules

Unit 3: Cell Theory * Types of Cells
* Cell Structures & Functions
* Microscopic Examination of Cells

Unit 4: Cell Processes * Cell Structures and Functions

Unit 5: Energy in Cells * Photosynthesis
* Cellular Respiration and Fermentation
 | **Semester 2:** Unit 5: Energy in Cells * Photosynthesis
* Cellular Respiration and Fermentation

Unit 6: Cell Cycle * Cell Growth and Division
* Cancer treatments

Unit 7: Genetics * Meiosis and Mendelian Genetics
* Human Heredity
* DNA
* RNA and Protein Synthesis

Unit 8: Evolution * Natural Selection
* Evolution of Populations

Unit 9: Classification Taxonomic Keys, Cladistics |

**Differentiated Classroom Practice (ELL, TAG, SpED, other):**

I subscribe to the belief that the best learning is done with high expectations and strong support. Differentiation strategies include a wide variety of practice options, one-on-one supports during and outside of class, direct feedback on work, and activities tailored to pre-assessment results. We will use the following to make our class time engaging for everyone:

|  |  |  |
| --- | --- | --- |
| Flexible Grouping / Group Work Student Centered Curriculum Tiered Assignments Pre-instruction Assessment   | Independent group Projects/Research Open-ended Tasks Questioning Techniques Students as teachers/producers Criteria Sheets | Learning Centers/Stations Role Play Activities Protocoled Classroom Discussion Narrative Writing Student Self Assessment/Rubrics  |

**Laboratory Investigations:**

On a regular basis, students will be participating in laboratory investigations. These allow for further study of the topic and to enhance the processing of new information. It is important that student behavior is safe and cooperative during laboratory exercises to ensure success and safety for all. **Please see safety contract for additional safety information.**

**Support/Extra Help:**

 I love and believe that science is a wonderful fascinating way to look at the world. Scientific concepts are not always easy and can include difficult vocabulary that we don’t often use in our everyday lives. While we strive to meet the learning needs of every student some students will find they need extra support along the way. If/when this happens we’ll work together to find the resources and support so that each student can find their stride.

  **The best way to ensure I am available to help is to set up a scheduled time to meet. I am here early in morning, before school, and usually stay late after school. Please set up an appointment via email so I can provide you with uninterrupted help**.

Approved 9/13/2016

**Freshman Biology 2016 Syllabus Contract**

Please Return This Paper To Mr. Napoli

I have read and understand the attached course description. I understand that:

* I need specified materials to succeed in this class,
* I need to attend class and complete classwork and homework to be successful,
* Being tardy can result in missing the warm-up and/or classwork assignment
* All regulations outlined in the Jefferson student handbook will be enforced.
* Mr. Napoli is available for extra help and it is the student’s responsibility to schedule available time.

Student Name (print) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent or Guardian Name (print) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent or Guardian Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The best way to reach me is:

\_\_\_\_\_by e-mail \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_by phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_