**Biology Course Outline 2023-2024**

**Teacher information**

Mrs. Marshall Room 305 kmarshall@clearfield.org - [mrsmarshall305.weebly.com](http://mrsmarshall305.weebly.com/)

**Overview:**

Biology is a requirement to graduate Clearfield Area Junior/ Senior High School. During this course, all aspects of general biology will be covered including; molecular, cellular, evolutionary, organismal biology, ecology, genetics, biotechnology and systematics. Students will learn through a combination of self-study, small group, cooperative learning and class discussions. Lab techniques, methodologies and process skills will be emphasized. This course is to be taken in preparation of the Biology Keystone Exam. This class will meet for one (1) hour five (5) days per week.

**Grading Policy:**

**Academic Honesty:**

In order to realize their full potential for learning, students must complete their own work. Any form of cheating or plagiarism on tests and quizzes is unacceptable. Using another person’s words, ideas, or work as your own will result in a failing grade. Additionally, any student who knowingly allows another student to use his or her task will also receive a failing grade. Administration and parents will be contacted in cases of academic misconduct. Please refer to the student handbook for further explanation.

**Electronic Device Policy:**

Cell phones, music players, games etc. are not allowed during class unless explicitly instructed by the teacher. Headphones and earplugs must be removed and stowed away before the bell and until after you are dismissed from class. If these rules are not followed, you will receive one warning. Upon the second infraction, you will be asked to turn in your devices to the cell phone jail. If a third infraction occurs, parent / guardian contact will be made and you will be asked to turn in your device. Any further instances will result in a formal referral to the office.

**Discipline:**

In a culture of respect and responsibility, the expectation is that students will treat each other as well as teachers and staff with respect. Therefore, words or actions that are disrespectful or that prevent us from accomplishing our tasks will be dealt with using the following discipline procedures.

1. Verbal warning.
2. One-on-one meeting with student after class and parent/ guardian contact
3. Written referral and parent/ guardian contact.
4. Removal to Principal’s office. Formal disciplinary action may result.

\* Certain actions, especially those of a dangerous, offensive, or disrespectful nature, will be dealt with immediately and will result in the student being removed to the office.

**Laptop Policy:**

Student computers are for the educational benefit of the student, not to provide entertainment. During class, the computer is to be used strictly for educational purposes. They are not to be used for playing games, watching moves, or videos, communicating via social media sites or for any other recreational/entertaining uses.

1. No food or drink is allowed next to your laptop while it is in use.
2. Cords, cables, and removable storage devices must be inserted carefully into the laptop.
3. Students should never carry their laptops while the screen is open, unless directed to do so by a teacher.

**Book sign out Policy:**

An electronic book is available for each student. Please see the Microsoft Teams page for more information

Textbooks are available to sign out at any time. Replacement cost of the textbook is $92.00. When signing out a textbook the following procedure must be followed

1. Obtain a book from the right side of the bottom shelf **(highest number)**
2. Write your name in the student name column
3. Write the book number in the book number column
4. Record the date in the date signed out column when returning your book, please mark the date of your return in the date returned column and mark if the textbook is damaged.

 **Class Attendance:**

Expect every minute of class time to be utilized. It will be much more difficult for you to learn if you are not in class each day.  If you are, absent from class for any reason, **IT IS YOUR RESPONSIBIILTY** to find out what you missed and what can be done to make it up. In order to find out what you missed, please follow these steps

1. Check the class Teams page for missed warm ups, table of contents entries, and/ or document download
2. Check with fellow students for any important information that was missed; be sure to ask fellow students for help if needed
3. Submit a missing work log for all assignments that need to be graded

**Make-up Policy:**

Late work policy: The first day work is late; the highest grade attainable will be a 75%. Any day after that, the student may receive a maximum grade of 50%. In the event a student submits an assignment late due to an EXCUSED absence, the student will not be penalized as long as the work is submitted in accordance to the student handbook.

Test retake policy: All tests, quizzes and assignments may be redone for partial credit on the basis that all makeup work has been completed. A test retake request must be submitted prior to retaking the test/quiz.

In order to receive credit, all assignments must be

* Handed in on time, properly labeled (Title, Name, Date)
* In good condition (No tears, folds or wrinkles)
* Legibly written in pencil, ink or typed.

**Restroom Policy:**

Students may use the restroom during the first and last five minutes of class. The daily warm up must be completed before permission to use the restroom will be granted (with exception: emergencies). Students are required to sign out, list the date, time, destination and name. Students are required to take the bathroom pass. If a student fails to follow this procedure properly, that student forfeits the opportunity to use the restroom for 5 school days (with exception: emergencies)

## *Class Rules*

## Be respectful

## Be responsible

## Be Mature

## ****Biology 2023-2024****[Yearly Unit Plan](http://www.learningliftoff.com/wp-content/uploads/2014/01/HS-Science-mapping-BIO-HS_BIO_S1_01_01_0103_MMAP_course_opener.swf)

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| --- | --- |
| **Semester 1****Ch.1 The Science of Biology** * **Scientific Method**
* **Independent vs. Dependent variables**
* **Characteristics of Life**

**Ch. 7 Cell Structure and Function*** **Microscopes**
* **Cell Theory**
* **Eukaryote vs. Prokaryote**
* **Cell Structure**
* **Cell Transport**

**Ch. 2 Chemistry of Life*** **Nature of Matter**
* **Properties of Water**
* **Macromolecules**
* **Chemical Reactions and Enzymes**

**Ch. 9 Cellular Respiration and Fermentation*** **Cellular Respiration**
* **Glycolysis and Krebs Cycle**
* **Fermentation**

**Ch. 8 Photosynthesis** * **Energy**
* **Photosynthesis**
* **ETC and Calvin Cycle**

**Ch. 12 DNA** * **History of DNA**
* **Base Pairing**
* **DNA Replication**

**Ch. 10 Cell Growth and Division*** **Cell Size**
* **Cell Division**
* **Mitosis**
 | **Semester 2****Ch. 13 RNA and Protein Synthesis*** **RNA**
* **Genetic Code**
* **Mutations**

**Ch. 11 + 14 Genetics and Human Heredity*** **Gregor Mendel**
* **Mendel’s Principles**
* **Patterns of Inheritance**
* **Meiosis (Ch. 11.4)**
* **Pedigrees**
* **Genetic Disorders**

**Ch. 16+17 Evolution** * **Darwin’s Theory**
* **Evidence of Evolution**
* **Evolution of Populations**

**Ch. 3 Biosphere*** **Ecology**
* **Energy Flow**
* **Food Webs**
* **Cycles of Matter**

**Ch. 4 Ecosystems and Communities*** **Community Interactions**
* **Succession**
* **Biomes**

**Ch. 5 + Ch. 6 Populations+ Human Impact*** **Limits to Growth**
* **Biological Magnification**

**Ch. 15 Genetic Engineering*** **Selective Breeding**
* **Recombinant DNA**

**Keystone Exams****Dissections** |