Biology I Syllabus

Mrs. Cluck

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**Program Summary**

 Students will engage in a variety of learning experiences using technology and traditional approaches: group work, partner collaboration, projects, hands-on activities, online research, and more. The teacher and Classroom Coach will work together to make each class productive, rigorous, and engaging.

**Course Description**

 Biology is designed to provide information regarding the fundamental concepts of life and life processes. This course includes (but are not restricted to) such topics as cell structure and function, reproduction, general plant and animal physiology, genetics, ecology, evolution and taxonomy

**Required Text**

* Inspire Biology McGraw Hill

A book will not be checked out to you. When the text is needed you may check out a book from me to borrow.

* There is also an online version of the text that you will have access to located on the classroom site.

**Required Materials**

* Pencil/Pen/ Highlighter
* Computer
* Library book
* Textbook (as needed)
* Paper/ Notebooks

**Participation Points**

 I will give participation points (2) each day of class. These points will be given based on attendance, behavior, preparedness, participation and attitude. Loss of participation points will be due to failure to participate and a failure in any of the above mentioned categories.

**Absences:** If you miss a class due to an absence, you may make up those participation points. You must make them up within the week before the grade is posted on Friday. To make up participation points, come and check in with me to see what you missed or will be missing. You are responsible for finding out what you missed following an absence or before.

 **Teacher absent**: It is your responsibility to check the classroom site for your assignment.

**Grades**

| **A** | 90-100 |
| --- | --- |
| **B** | 80-89 |
| **C** | 70-79 |
| **D** | 60-69 |
| **F** | 0-59 |

**Homework/Quizzes/Tests**

 There will be a variety of different assignments, projects, and quizzes throughout the year. There will be a test after each chapter. The test format may have different styles to it like multiple choice, short answer, true or false, or essays.

**Late Work**

All work is due as assigned. Assignments not turned in on the due date may be turned in for up to half-credit on the class period following the due date. Thereafter, no credit will be given for assignments not turned in. \*Teacher discretion may be used

**Students will have one day for each day absent to make up their work.**

**Classroom Rules and Expectations**

* Respect yourself, others, and the classroom environment
* Come to class prepared and ready to learn
* Pay attention and be an active participant

**Student Handbook Policies**

1. **Cell Phones**

Students are required to store their device in their lockers/ bags. They will not be allowed in the classroom

1. **Cheating**

 Cheating will not be tolerated in my classroom. If you are caught cheating you will receive a 0 for that assignment. Do you own work!

1. **Food/ Drink**

 There will absolutely be no food or drink allowed in the classroom. Bottled water only.

1. **Other Policies**

 Make sure to follow all school policies in your student handbook. These will be enforced through the year.

**Course Overview**

| **Unit and Duration** | **Topics Addressed** | **Standards** |
| --- | --- | --- |
| **Unit 1:** Cellular Structure and Function4 weeks | Hierarchy of Systems Cells Foundational Concepts History of Cell Discovery |  HS-LS1-2 HS -LS1-1  |
| **Unit 2:** Cellular Energy4 weeks | Photosynthesis Cellular Respiration | HS-LS1-5HS-LS2-5HS-LS1-7 |
| **Unit 3:** Cellular Reproduction and Sexual Reproduction4 weeks | Chromosomes (LS1-1, LS3-1) Cellular DIvision (LS1-4) | HS-LS1-1HS-LS3-1HS-LS1-4 |
| **Unit 4:** Molecular Genetics and Biotechnology3 weeks | History/ Discovery of DNA DNA Structure The Human Genome  | HS-LS3-1HS-LS1-1 |
| **Unit 5**: Introduction to Genetics4 weeks | Mendel GregorGeneticsHeredityGenetic Disorders/ Real life examples | HS-LS1-4 HS-LS3-1HS-LS3-2HS-LS3-3 |
| **Unit 6:** Principles of Ecology, Ecosystems, and Biodiversity5 weeks | Ecology - organisms and their relationships, flow of energyEcosystems - Community relationships, aquatic and terrestrial biomes,Biodiversity - threats and conservation of biodiversity | HS-LS2-1 HS-LS2-2HS-LS2-6HS-LS2-7 HS-LS2-8HS-LS4-6 |
| **Unit 7:** Introduction to Botany | Plant evolution and diversityPlant Structure and FunctionPlant Reproduction | HS-LS1-1. HS-LS1-2HS-LS1-3. |
| **Unit 8:** Introduction to Animals | Animal CharacteristicsAnimal body plansInvertebrates and VertebratesAnimal Behavior | HS-LS1-1. HS-LS1-2HS-LS1-3. |
| **Unit 9: History of Life** | Fossil Evidence and ChangeOrigins of LifeDarwin’s Theory of EvolutionTaxonomy - Domains, Kingdoms, Classifications | HS-LS4-1 HS-LS4-2 HS-LS4-3 HS-LS4-4HS-LS4-5 |

\*\*Syllabus is subject to change