LEARNING UNLIMITED PREPARATORY SCHOOL

**BIOLOGY 2022 - 23 SYLLABUS**

**Science Lab**

**Welcome Back!** **Welcome to Ms. Sarah’s Biology Class.** Hope you had an enjoyable and restorative summer break and are set to begin another year of challenges and stimulation! As lifelong learners of the global world, I invite you to think positively about the dynamic, natural world and its multitude of complex web of interconnected relationships! I may not always have all the answers, but it is my hope that we will learn collaboratively and have fun discovering the answers together! Let us challenge each other to become the best of our potential selves!

**Course Textbook:** This year we will be using Biggs, A. (2009). *Biology*. Glencoe/McGraw-Hill. We may use supplementary resources as appropriate.

**Course Description:** This is a first-year biology course in which students will further their understanding of the processes that occur in biological systems. In general, students will study the structure, function, growth, origin, evolution, and distribution of living organisms. Students will be refining the skills related to scientific investigation when they independently design and carry out investigations, and communicate results. Emphasis will be placed on the practical application of concepts, and on the skills needed for further study in various branches of the life sciences and related fields.

This course focuses on the processes that occur in biological systems. Specifically, students will study theory and conduct investigations in the areas of ecology (homeostasis and population dynamics), cellular biology, metabolic processes, gene expression, energy production, biological evolution and diversity, plant and animal structure and function, and human organ systems. This course will serve as a solid foundation for study of more advanced science courses.

Using the textbook as the foundation for learning, we will engage in individual assignments, group activities, interactive activities, and projects. We will cover a breadth of material. Effort will be made to incorporate current events in biological sciences, as well as apply mathematical knowledge and technology. Listed below are the major units to be covered in the time frame provided:

**SEMESTER 1** **SEMESTER 2**

Unit 1: Ecology (Ch 1 - 5) Unit 3: Genetics (Ch 10 - 13)

Unit 2: The Cell (Ch 6 - 9) Unit 4: Biological Diversity (Ch 14 – 17)

Unit 5: Bacteria, Viruses, Protists and Fungi(Ch 18 - 20)

Unit 7: Invertebrates (Ch 24 – 27)

Unit 8: The Human Body (Ch 32 – 37)

Unit 6: Plants (Ch 21 – 22)

**Course Overview:** Throughout the year, you will be exposed to experiences, activities and information that will both challenge and stimulate the scientific side of your academic learning. While encouraging you to be a lifelong learner, I will also foster your development of various life skills, especially those associated with communications, problem-solving, critical thinking, collaboration, and citizenship.

Learning Unlimited Preparatory School is committed to ensuring that students have a mechanism for collecting and presenting their best work produced throughout their academic years and beyond; I will be emphasizing this in the form of student academic digital portfolios. As such, each activity, assignment and project is designed with the idea that students will be able, and are expected to use, any of the course products created and completed to assemble their individual digital portfolios.

Success in Biology requires understanding from both a conceptual and practical approach. Knowledge and mastery of skills required for high school level Biology will be enhanced via PBL. PBL focuses both on project- and problem-based learning. All these learning experiences will lend themselves well as representative work for **Student-Led Conferences (SLCs).**

**Course Policies & Procedures:**  Your success in this class is dependent upon your willingness and motivation to work and learn beyond the allotted class time.

* Set aside at least **30 minutes** every night to read sections of the textbook AND to review material covered/discussed in class. DO YOUR HOMEWORK INDIVIDUALLY AND SUBMIT IN A TIMELY FASHION!!!
* Throughout the year, you will be expected to write research reports and utilize various reference sources. You will be expected to cite your references accordingly or be penalized with a failing grade for the assignment.
* Group work is expected. Please remember to work collaboratively and harmoniously!
* Assignments, projects, lab reports, etc. are expected to be turned in as per deadline date AND time. After 1-day post-deadline date, late assignments WILL NOT BE ACCEPTED*.* An assignment submitted a day after the expected due date will be subject to a 30% penalty. To better prepare you for college life, **LATE WORK IS PROHIBITED**! *If extenuating circumstances should arise, it is YOUR responsibility to communicate with the teacher prior to deadline date(s).*
* Please prepare for weekly quizzes, especially those associated with chapter vocabulary. **Review daily** and be prepared for Section Review “pop quizzes”. Learning, remembering, and utilizing the proper scientific terminology is crucial for basic success in the course.
* Those absent (unexcused) during the day of a quiz/exam will not be permitted to “make it up”. If the absence is excused, you are responsible for arranging to write the quiz/exam within one week of the absence; failure to do so, results in a score of “F”.

Students are responsible for their own academic success. **This means a student who misses a class period for any reason is responsible for determining the day’s assignment and completing the requisite work.**

**Supplies & Materials:** You are expected to provide your own supplies, unless otherwise provided by the teacher. You are solely responsible for acquiring and maintaining these items: personal digital device, USB flash drive, scientific calculator. **Access to a computer, tablet or e-Reader will be necessary to utilize the digital format of the textbook AND to complete assignments.**

Each day’s lessons and major assignments/projects will be available digitally, and can be found at **msbeland.weebly.com**.

Assignments will be submitted via the appropriate category in Ms. Beland’s BIOLOGY Google Classroom.

\*\*\*Contents of this syllabus, course policies and procedures are subject to change, by the teacher, with prior notice to students before implementation.

**REMEMBER: CHEATING AND PLAGIARISM ARE PROHIBITED!!**

**NO FOOD OR BEVERAGES IN THE CLASSROOM!**

**Grading Distribution:** Your grades will reflect a weighting distribution according to the following categories:

ASSIGNMENTS [Homework/Participation/Class Work/Projects/Labs] = 50% ASSESSMENTS [Quizzes/Tests] = 50%

**Grading Scheme: A** = 90 -100% **B** = 80 – 89% **C** = 70 – 79% **D** = 65 – 69% **F** = <65%

**Quarter 1**: 20 % **Quarter 2**: 20% **Mid-Term Exam:** 10% **Quarter 3:** 20% **Quarter 4:** 20% **Final Exam:** 10%

**School Policies & Procedures:** Please refer to the Student Parent Handbook located online (*http://www.luschool.com/student-parent-handbook.html*) for further information regarding school-wide policies and procedures.

**Contact:** Daily lessons can be viewed on: **msbeland.weebly.com**. You may address any further concerns, deliver assignments, projects, lab reports, etc. to the following email address: [sbeland@luschool.com](mailto:sbeland@luschool.com). If you desire immediate feedback/response, please send me a **Google Chat**.

**\*\* Your limitation—it’s only your imagination!\*\***