**Course Description:**

Honors Biology is a freshman and sophomore level course that focuses on the molecular basis of biology. The unifying principles that define this course are: cells, genetics, evolution and diversity, ecology, animal structure and function and plant structure and function.

The investigations and laboratories in this course will provide the students with the opportunity to develop their lab skills. The labs will actively involve students in the inquiry process and develop higher-level cognitive skills. Homework assignments, online quizzes, in-class pop quizzes, tests, labs and an organized notebook will all be used as instruments for evaluation. The course content is subject to change to meet the requirements of the new state end of course exam and the ACT Quality-Core End of Course Biology Exam.

**Textbook:** Campbell Essential Biology with Physiology 4th Edition, Pearson.

**On-line textbook and Resources: www.PearsonSchool.com/Access**

Access Code for Pearson’s Online Solutions: ***Coming Soon***

**Homework and Class information:**

Canvas: **https://bexleyschools.instructure.com/login**

(Login & password is the same for logging onto the computer)

**First Semester Topics:**

Chapter 1: Introduction: Biology Today.

Chapter 2: Essential Chemistry for Biology

Chapter 3: The Molecules of Life.

Chapter 4: A Tour of the Cell Reproduction.

Chapter 5: The Working Cell.

Chapter 6: Cellular Respiration: Obtaining Energy from Food.

Chapter 7: Photosynthesis: Using Light to Make Food.

Chapter 8: Cellular Reproduction: Cells from Cells.

Chapter 9: Patterns of Inheritance.

**Second Semester Topics:**

Chapter 10: The Structure and Function of DNA.

Chapter 11: How Genes are Controlled.

Chapter 13: How Populations Evolve.

Chapter 14: How Biological Diversity Evolves.

Chapter 15: The Evolution of Microbial Life.

Chapter 17: The Evolution of Animals.

Chapter 18: An Introduction to Ecology and the Biosphere.

Chapter 19: Population Ecology.

Chapter 6 & 20: Obtaining Energy from Food & Communities and Ecosystems.

Chapter 21: Unifying Concepts of Animal Structure and Function.

*The above schedule is a typical outline for semester 1 and 2; however this order may change anytime at the teacher’s discretion.*

**Classroom Rules and Expectations:**

1. Be respectful, reasonable and responsible.
2. Follow directions.
3. Be in your assigned seat when the bell rings.
4. Come to class prepared, including using the restroom before the bell rings.
5. Food is discouraged, but feel free to bring a drink that can be sealed.
6. Remain in your seats until the bell rings; no lining up at the door.

**Materials:**

1. Every day bring the following to class: your binder, a calculator, a pencil with an eraser, and a pen.
2. For this class a binder is required, to keep all of your work for the entire semester. It needs to be organized chronologically for the year, by chapter, or in sections that include: notes, homework, labs, projects, quizzes. **There is a binder check each semester.**

**Homework:**

1. Homework will be checked at the beginning of class and is due at this time. It will be checked for completeness or for a grade; however, you will not be told ahead of time how it will be graded.
2. Late homework is typically not accepted, since we often go over it in class the day it is due.
3. For homework that is more extensive, or ones we do not go over in class I will accept late, but at a reduced grade.
4. If you are having problems with the homework come and see me for help; do not copy someone else’s work. Homework is meant to be challenging to help you learn and to reinforce concepts. Anyone caught copying and/or providing work to be copied will receive a zero on that assignment.

**Tests and Quizzes:**

1. Quizzes will be announced and unannounced depending on the circumstance to see where students’ understanding is on the material.
2. Tests will always be announced several days in advance and we will have some type of review to help you prepare.
3. There are no test retakes, so please prepare accordingly for the test.

**Labs:**

1. The lab title is to be placed at the top of your paper with your name and period.
2. All questions are to be answered in complete sentences, unless noted.
3. When drawings are called for they need to be in colored pencil, unless noted, as well as being labeled with recognizable parts and magnification.
4. All graphs must be fully labeled for full credit. This includes a title, labeling the x- and y- axis, including correct units, and labeling the data that is graphed.
5. When lab handouts are provided do not squeeze your answers between the lines if there is not enough room. Write them out separately on a sheet of notebook paper and attach it. (Half sheets are acceptable when there are only a few questions)