



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, inclass 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: ssnast-grsss-bland-henna-lewis-noise

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.