## 4123-Biology Course Syllabus

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**Grade:** 9 **Website:** www.austinhighbiology.weebly.com

### Description

This course provides a conceptual knowledge of biology. An emphasis is placed on giving students a basis for making informed decisions on biological topics in the world today.

### Course Standards

#### Students will:

- Consider the impact of viral diseases including the transmission, symptoms, treatment and prevention as that relate to the human immune system.
- Evaluate common bacterial diseases relative to their transmission, treatment, prevention and social implications.
- Discuss the role of AIDS and other sexually transmitted diseases emphasizing prevention, treatment and interaction with the immune system.
- Compare diversity in plant and animal cells as they relate to cell function.
- Explore the structure and activities of the plasma membrane as they relate to the needs of the cell.
- Explain how a pyramid can be used to represent energy flow in a food chain.
- Demonstrate the properties of light as the source of energy for synthesis of organic molecules.
- Analyze the role of ATP in a cell.
- Summarize cellular respiration and illustrate its relationship to photosynthesis.
- Investigate the role of DNA as the molecule of heredity.
- Investigate the significance of Mendel's principles of heredity.
- Examine the patterns of human inheritance.
- Examine populations relative to natural selection, gene pools and speciation.

#### Textbook

Miller & Levine. Biology 2015

Students will use textbooks from a class set during the class period. There will be an online version of the textbook available.

## **Required Materials**

- 1 subject spiral notebook, college ruled with plastic cover. Must be 8.5"x11"
- Colored pencils
- 4 glue sticks
- Pens & number 2 pencils
- Scissors
- Highlighters
- ream of copy/printer paper
- Erasers
- Elmers glue bottle
- box of facial tissues

# **Grading**

Students will be evaluated on class assignments, activities and labs which will be weighted accordingly to determine each six weeks grade:

Daily Grades (labs, daily assignments, homework) 50% Tests 50%

# **Academic Dishonesty**

According to the Austin High Student/Parent Handbook, Academic dishonesty includes, but is not exclusive to: using notes or study aids without permission during a quiz or test, falsifying someone else's work as one's own, including plagiarism, looking at another person's quiz or test without the teacher's explicit permission. Consequences for academic dishonesty include: zero for the assignment without an opportunity for making-up the assignment, a call home, the mistrust of your instructor, the refusal of your instructor to write a letter of recommendation for you. Austin High personnel may assign additional consequences if the dishonesty persists.

Teachers are trying to evaluate your knowledge of the subject area. You may want to make the following adaptations so that your work presented for this class represents only your honest effort. Never copy work from a friend whether this is for homework or on an exam. Be careful about accepting help from tutors, friends or parents - we want your work. Be sure to try to answer the question or solve the problem before asking for help. Do not ask peers for exam information. Do not give peers exam information.

### Tardy & Truancy Policy

The Austin High Policy and will be followed.

## Late Work

Student may submit assignments up to 4 days after original due date with a 10 point penalty per day late. After 4 days a student may earn up to a 50 for completion of assignment or alternative assignment comparable to original assignment, in the classroom with teacher. This assignment must be completed no later than 1 week prior to the last day of the grading period.

## Extra Credit

Students may do one extra credit assignment for each unit. Assignments are due one week after the unit test. Extra credit assignments are worth up to 25 points.

### Tutoring

Tutoring is available to all students. I am available for tutoring Tuesday & Thursday 4:15pm - 4:45, and during lunch Tuesday - Thursday by appointment.

# Retesting

If a student scores a 74% or below on an exam, the student may retake the test for a grade up to a 75.

# **Units Covered:**

Scientific Method/Safety
Characteristics of Life
Biotic/Abiotic Cycles
Ecosystems
Classification
Biochemistry
Cell Structure and Cell Processes
Genetics
Heredity
Evolution
Classification
Kingdoms
Human Systems

Viruses DNA/RNA/Protein Synthesis

I have read and understand the requirements and expectations for this course and will do my best to attend every day, participate and complete the required work for the course.	
Student Signature	Date
I have read and understand the requirements and expectations for the my student in regular attendance and completion of required works	, , , , , , , , , , , , , , , , , , , ,
Parent/Guardian Signature	Date

YOU KEEP THIS FORM!