



*Fairfield Ludlowe High School - Fairfield Warde High School*

## **BIOLOGY**

Teacher Name

Room Number

Full Year

Period

Teacher Email

### **COURSE DESCRIPTION**

Students in high school develop understanding of key concepts that will help them make sense of life science. The ideas are built upon students' science understanding of disciplinary core ideas, science and engineering practices, and crosscutting concepts from earlier grades. There are four life science disciplinary core ideas in high school: 1) From Molecules to Organisms: Structures and Processes, 2) Ecosystems: Interactions, Energy, and Dynamics, 3) Heredity: Inheritance and Variation of Traits, 4) Biological Evolution: Unity and Diversity. The performance expectations for high school life science blend core ideas with scientific and engineering practices and crosscutting concepts to support students in developing usable knowledge that can be applied across the science disciplines. While the performance expectations in high school life science couple particular practices with specific disciplinary core ideas, instructional decisions include use of many practices.

### **COURSE OBJECTIVES**

Students will understand that:

- Over many generations variations in the living organisms arise allowing them to survive in an ever changing Earth.
- The structure of biological components determines the role they play in the survival of a species.
- All living organisms maintain a balance internally and between individuals, this equilibrium can be disturbed by natural or human events.

### **UNITS OF STUDY**

Unit 1: Biological Evolution: Unity and Diversity

1a: Natural Selection

1b: Speciation and Common Ancestry

Unit 2: Heredity: Inheritance and Variation of Traits

2a: Heredity: DNA to Trait

2b: Inheritance and Variation of Traits

Unit 3: From Molecules to Organisms: Structures and Processes

3a: Homeostasis, Cellular Respiration and Anaerobic Respiration

3b: Photosynthesis: Energy and Matter in Living Systems

Unit 4: Ecosystems: Interactions, Energy, and Dynamics

### **COURSE POLICIES AND REQUIREMENTS**

**GRADING** (see [FPS BOE Policy 6154.1AR](#))

o Cumulative/In-Progress Grade:

10% of the grade will be based on formative assessments, homework completion, and/or behavior

90% will be based on summative assessments, of which there will be a minimum of eight for this full-year course; these may include Unit Tests, Mid-Unit Tests, Projects, Performance Tasks, Summative Quizzes, etc.

o End-of-the-Year Grade:

80% of the overall course grade will reflect the student's mastery of course content and skills during the school year through the Cumulative/In-Progress Grade

10% of the End-of-the-Year course grade will be based on the Mid-Year Assessment

10% of the End-of-the-Year course grade will be based on the Final Assessment

o Grade Reporting:

All grades will be communicated through Infinite Campus

Summative assessment results will be reported back to the student within ten school days from the date of submission or the due date

o Guidelines for Late Work:

Late work will be accepted for both summative and formative tasks within a defined timeline agreed upon between the student and the teacher

The total points may be reduced as a penalty for late work.

o Reassessments:

- Any extenuating circumstances may be discussed with administration to allow alternative reassessment opportunities with administrative approval.

- Reassessment opportunities are defined as twice per year (with a maximum of one per quarter) for assignments that students met the original required deadlines and do not violate the academic integrity policy. Reassessment does not apply to midyear assessments or final assessments.

- Gradebook impact of Reassessment: original and reassessment scores will be averaged in the gradebook.

## **MATERIALS**

## **EXPECTATIONS OF STUDENTS**

## **EXTRA HELP**