

## **Biology – Trimester 2 Syllabus**

**Term:** Trimester 2

### **Course Description**

Biology Trimester 2 builds on foundational biological concepts with a focus on human health, evolution, genetics, and ecological decision-making. Using inquiry-based learning and real-world case studies from the New Visions Biology curriculum, students will analyze data, construct explanations, and apply scientific reasoning to complex biological problems.

**Grade Level:** 9–10

**Prerequisites:** Successful completion of Trimester 1 Biology or equivalent

### **3. Textbook & Online Resources**

#### **Primary Curriculum Resource:**

- New Visions Biology Curriculum (Units 2, 3, and 4)

#### **Unit Resources:**

- Humans vs. Bacteria
- Evolution of Sick Humans
- Saving the Mountain Lion

#### **Digital Platforms:**

- Google Classroom (assignments, resources, announcements)
- Google Docs/Slides
- NYSED Reference Tables for Living Environment
- IXL / other school-approved digital tools (as assigned)

### **4. Course Objectives**

By the end of Trimester 2, students will:

- Analyze biological data to identify patterns and relationships •
- Explain how natural selection and evolution impact human health •

RESPECT • TENACITY • COLLABORATION • INNOVATION • PERSEVERANCE

Investigate genetic variation and inheritance

- Evaluate ecological trade-offs using evidence-based reasoning
- Conduct and analyze a required NYS State Lab investigation

## 5. Course Outcomes

Students will demonstrate learning through:

- Unit assessments and quizzes
- Scientific explanations supported by evidence
- Lab reports, including the **NYS Required Lactose Tolerance State Lab**
- Group projects and presentations
- Written arguments aligned to scientific standards and real-world applications

## 6. Grading Policy

**Grading Categories:**

|                                                                                                                                                                                                                                                                                                                                  |                      |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------|
| <b>Classwork</b> <ul style="list-style-type: none"> <li>• Cornell Notes</li> <li>• Participation</li> <li>• Formative Assessments</li> </ul>                                                                                                                                                                                     | 15%<br>10%<br>5%     | <b>30%</b>  |
| <b>Homework</b>                                                                                                                                                                                                                                                                                                                  |                      | <b>10%</b>  |
| <b>Assessments</b> <ul style="list-style-type: none"> <li>• Quizzes/Exit Slips</li> <li>• Projects/Labs</li> <li>• Tests (including Regents Examinations &amp; Unit Exams)</li> <li>• Final</li> </ul> <p>(Teacher autonomy on dividing percentages provided clearly articulated with department chair and/or administrator)</p> | 20 %<br>10 %<br>30 % | <b>60%</b>  |
|                                                                                                                                                                                                                                                                                                                                  | <b>Total</b>         | <b>100%</b> |

### **Late Work Policy:**

- Late work may receive partial credit if submitted within the approved time frame
- Major assessments must be completed; make-up opportunities are provided for excused absences

### **Extra Credit:**

- Offered at teacher discretion and aligned to course objectives

## **7. Ethics & Academic Integrity**

Students are expected to:

- Submit original work
- Properly cite sources
- Refrain from plagiarism, cheating, or misuse of AI tools

Violations of academic integrity will follow school disciplinary guidelines.

## **8. Alignment to Standards**

This course aligns with:

- **New York State Living Environment Standards**
- **NYS Common Core State Standards (CCSS)** for Literacy in Science •
- **College and Career Readiness Standards (CCRS)** with emphasis on critical thinking, collaboration, and scientific reasoning

## **9. Student Responsibilities**

Students are responsible for:

- Attending class prepared and on time
- Completing assignments and assessments
- Participating respectfully in labs and discussions
- Monitoring grades and feedback via Google Classroom

## **10. Teacher Responsibilities**

The teacher will:

- Provide standards-aligned instruction
- Offer timely feedback on assignments
- Communicate expectations clearly
- Support student learning through differentiated instruction

## **11. Parent/Guardian Communication**

### **Communication Methods:**

- Google Classroom summaries
- Parent Portal
- Email and phone contact

Families are encouraged to reach out with questions or concerns at any time.

## **12. Assessment Types**

- Quizzes and unit tests
- Lab investigations and reports
- Projects and presentations
- Written explanations and CER responses
- Class discussions and exit tickets

## **13. Technology Use Policy**

- School-approved devices may be used for instructional purposes only
- AI tools may be used only with explicit teacher permission
- Misuse of technology may result in disciplinary action

## **14. Course Calendar / Pacing Guide (Tentative)**



## **Unit 2: Humans vs. Bacteria**

- Antibiotics, resistance, and natural selection
- Major Assessment: Unit Test & CER Writing Task

## **Unit 3: Evolution of Sick Humans**

- Genetics, inheritance, and disease
- **Required NYS Lactose Tolerance State Lab** (Mandatory for course completion)

## **Unit 4: Saving the Mountain Lion**

- Ecology, biodiversity, and human impact
- Culminating Project: Evidence-based ecological decision-making task

## **15. Support Services**

Support is available through:

- Teacher office hours / extra help sessions
- Academic Intervention Services (AIS)
- Special Education supports (IEP/504 accommodations)
- English Language Learner (ELL) services
- Peer tutoring and school-based tutoring programs

## **16. Syllabus Acknowledgment**

I acknowledge that I have reviewed and understand the expectations and requirements of the Biology Trimester 2 syllabus.

**Student Name:** \_\_\_\_\_

**Student Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Parent/Guardian Name:** \_\_\_\_\_

**Parent/Guardian Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_