

# Overview of Biology 2015-2016

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**Textbook**---Biology (Glencoe Science)/Modern Biology (Holt Rinehart Winston)

**Materials Needed:** Organization is one of the keys to success in all classes, so all students will be required to keep a composition book (cow or marble book) as a notebook with all assignments, handouts, and notes from class, an Interactive Science Notebook (ISN). This will help ensure students have all of the information learned in the class when the time comes to review for the end of course exam. You will also need to bring your book, paper, and a writing tool to class daily. **NO CLICK PENS ALLOWED**

**Time/Opportunities for help and support:** Mondays from 3:15- 4:15 pm are designed for after school science help. I will be available for help on other days. Please let me know in advance if you plan to stay after, so I can make sure to be available.

## Course Description

Biology is an introductory laboratory-based course that includes a minimum of 30% hands-on investigations designed to familiarize the student with major concepts of biological science. Instruction is based on SC Science Curriculum Standards. This course provides numerous opportunities for students to develop science process skills, critical thinking, and an appreciation for the nature of science.

## Instructional Philosophy

Students will be given challenging real-world projects and assignments typical of the biological sciences. High quality work is essential and expected on time. Classroom activities will include reading, research, projects, and problem solving skills. Students will often work in teams and will be expected to complete individual assignment in relation to the standards driven topics. A variety of assessments will be used and explained further under Assessment and Grading.

## Course Goals/ Power Standards

1. Demonstrate a thorough understanding of interdependence of organisms; the cell; matter, energy, and organization in living things; the molecular basis of heredity; and biological evolution/
2. Learn about biology by talking, writing and communication in the language of a scientist.
3. Consistently read science related books (other than a textbook) or articles.
4. Use computers and other technologies to enhance learning and mastery of the standards.
5. Use science equipment and the scientific method to perform science activities in a laboratory setting and generate written reports of results.
6. Use numeracy skills and processes to collect, analyze, and present data as it relates to the biological sciences.
7. Work cooperatively to solve real-world problems using scientific concepts.

## Major Course Assignments and Projects

### Project #1: 3-D Cell Project

Students will create a 3 dimensional cell according to a rubric that describes the specifics of the project

### Project #2: Cell Cycle Drawing

Students draw and label the stages of Mitosis and describe events occurring at each stage.

### **Project #3: Photosynthesis and Respiration Poster**

Students create the cycle of photosynthesis and respiration to visually understand their relationship.

### **Project #4: Genetics Disorder Project**

Each student will select a genetically inherited disorder/disease and create a PowerPoint, poster, or brochure about the disease to present to the class.

### **Project #5: Food Web Poster**

Students will create a food web indicating the transmission of energy from one organism to another.

These assignments are subject to change based on the pacing guide.

### **Assessment and Grading Plan (Quarter Grades)**

During this class, students will be assessed in numerous ways which will include class work, labs, homework, test, quizzes, **(INCLUDING WEEKLY ROOT QUIZZES)** and projects. Your 9-weeks grades will be calculated as follows:

Tests	30%
Quizzes	15%
Labs/ Projects	30%
Homework/Class work	25%

**End of Course (EOC) or final exam will count 20% of your final grade. This exam is given by the State of South Carolina and is given toward the end of May based on Biology Standards taught throughout the year.**

A=	100-93
B=	92-85
C=	84-77
D=	76-70
F=	69-0

\*Students cannot receive a grade less than a 61 during 1<sup>st</sup> and 2<sup>nd</sup> quarterly grades, however, the grade they earn 3<sup>rd</sup> and 4<sup>th</sup> terms will be reflected on their report cards. If students are absent, they have 3 days from date of return to make up assignments, which is DISTRICT POLICY.

### **Class Rules**

1. Be Respectful to yourself and others.
2. Come to class prepared: bring your materials, homework, and being ready to learn.
3. Be on time.
4. Students will raise their hands before talking or leaving their seats.
5. No talking while the teacher is talking.
6. Follow lab safety rules and cleanup work area before leaving class.
7. Follow all WHS school rules.

### **Consequences**

1<sup>st</sup>: warning; sign index card

2<sup>nd</sup>: conference with student/phone call home; sign index card

3<sup>rd</sup>: signed index card **AND** office referral

For major offenses, links on this chain may be skipped, and students will be immediately turned over to administration.

**PLEASE RETURN THIS PAGE ONLY**

I have read and reviewed the course syllabus with my child. I understand and accept the information provided on this syllabus. Discovery Channel movies or other content related movies will be viewed throughout the course. These movies are either G, PG, or PG-13 rated. The parent/guardian signing below gives his/her child permission to watch these movies.

Please indicate any special needs and/or medical problems that may affect your child's performance in the classroom: \_\_\_\_\_

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

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

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

If the parent has an email address that could be used for communication, please write the email address below (please print clearly)

**Parent Email:** \_\_\_\_\_

\_\_\_\_\_  
**Home Telephone #**

\_\_\_\_\_  
**Work Telephone #**

\_\_\_\_\_  
**Cell Phone #**

**Additional Comments/Concerns:**

Be sure to check off EACH of the following as being read and understood:

\_\_\_\_\_ Overview of Biology

\_\_\_\_\_ Biology Pacing

\_\_\_\_\_ Course Description and Class Expectations