



**Applied Biology**  
2014-2015

Course Description:

Applied Biology has been developed to meet the state standards for Science & Technology and Ecology & Environment.

Applied Biology is designed for the technical academic student. Once a week students have a double lab period where we perform various hands-on applications of course concepts and experiments. Students will then have to display a working knowledge of these concepts in lab assignments and other assessments.

The district has implemented a co-teaching model in some sections of Applied Biology, meaning that your child may be in a class taught by two certified teachers. Teachers work collaboratively to effectively differentiate instruction and assessment and provide all students with opportunities to meet their individual learning styles.

The following topics are discussed and studied throughout the Applied Biology course: Scientific Method, Cells, Cell Cycle, DNA, Genetics, Evolution, Classification & Kingdoms of Life, Organizational levels of the Biosphere.

Applied Biology is a less rigorous course than Biology I. It covers similar topics in a broader scope and requires fewer independent assignments and formal lab reports.

Course Content:

- Science of Biology:
- Cell Structure & Function:
- Cell Growth & Division:
- Genetics:
- DNA:
- Evolution:
- Classification:
- The Biosphere:
- Ecology

Required Textbooks and/or Other Reading/Research Materials

This book has an on-line text in which each student has a license.

*Biology* by Miller and Levine. Pearson, 2010.

Course Requirements:

Students are expected to take an active role in their education by completing both independent and guided reading and note taking assignments, consistently completing assignments both in class and at home, conducting laboratory activities and analyzing results. Students must be responsible for their own appropriate classroom and laboratory behavior. Failure to complete assignments and submit them on-time will adversely affect the student's grade.

Grade Components/Assessments:

Grades will be weighted based on a category percentage. Sapphire will automatically give a student's grade total as a weighted percentage based on the following category percentage breakdown:

TESTS and Quizzes	50 %
Labs Projects Papers	25 %
Homework/Classwork	20 %
Ready Grade	05 %

Each marking period is worth 20% of a student's overall grade. The final is worth 20% of a student's overall average:

Quarter 1	20%
Quarter 2	20%
Quarter 3	20%
Quarter 4	20%
Final	20%

Required Summer Reading/Assignments:

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No summer assignment is given.