## **Course Description:**

This course focuses on mastery of the PA Academic Standards for Science and Technology as well as Environment and Ecology. As students progress through this course they will participate in a systematic study of the biological sciences that will prepare them for success in non-science studies in college or future careers. This course offers an investigation of living things at the molecular, cellular and organism levels. An emphasis will be placed on the structures and processes necessary for all organisms to maintain life. Class activities and discussions will demonstrate the relevancy of Biology to our personal well-being and that of the planet. This course is designed for students who intend to continue their education at a four-year college but do not intend to major in science. The course is appropriate for those planning careers in nursing and medical technology.

## Learning Activities / Modes of Assessment:

Large group instruction Tests and Quizzes Laboratory experiments (& write-ups) Group Presentations Small group work Projects with Rubrics Computer simulations Webquests

## **Instructional Resources:**

<u>Modern Biology</u>. Austin, TX: Holt, Rinehart and Winston, 2002. Appropriate Internet resources

Course: Biology, 10 <sup>th</sup> grade	
Course Unit (Topic)	Length of Instruction
1. Scientific Method	3 Days
2. Biomolecules	9 Days
3. Cells	13 Days
4. Energy in Cells	11 Days
5. Cell Division	12 Days
6. Mendelian Genetics	15 Days
7. Molecular Genetics	8 Days
8. Ecology	7 Days
9. Evolution	7 Days