

**Troy High School
Course Profile**

Course Title: Biology

Course Prerequisites: Refer To Registration Presentation

Course Description:

Biology is a laboratory science course for the college-bound student. The course emphasizes detailed knowledge of the central concepts, principles, and basic factual material on the following topics: molecular and cellular aspects of living things, structure and function of plants and animals, genetics, evolution, plant and animal diversity and principles of classification, ecological relationships, and animal behavior. This course satisfies the life science graduation requirement.

Students entering this course should have a mastery of the following concepts and possess the following skills:

- Basic note taking
- Basic graphing
- Listening and speaking skills
- Nightly reviewing
- Reading Comprehension

During this course students will continue to develop mastery of the following concepts and possess the following skills:

- Complex understanding of change, cycles, patterns, and relationships in the living world
- Cellular organization and classification of organisms
- The dynamic relationships among organisms, populations, communities, and ecosystems
- Change as a result of the transmission of genetic information from generation to generation
- Scientific view defines the idea that explanations of nature are developed and tested using observation, experimentation, models, evidence, and systematic processes based on logical thinking
- Organization and mathematical analysis of data, manipulation of variables in experiments, and identification of sources of experimental error

Workload Expectations for this course (list typical amount of homework, projects, presentations, papers, etc.):

Units in College Prep Biology are typically 1 - 2 chapters and span 3- 4 weeks. Each semester contains approximately 4-5 units of study.

For each unit students are expected to:

Read the text assigned, take notes and review notes nightly

Complete homework (minimum 30 minutes nightly)

Complete 1-2 laboratory (C-E-R) activities per unit

Create Graphs and data tables

Use data and evidence to support claims

Answer questions from laboratory work or activities

Participate in class discussions, engage in scientific discourse, take notes, make meaningful contributions to group work and activities

Take 1-3 Quizzes

Take 1 Comprehensive Exam

1 comprehensive final each semester