Troy High School
Course Profile

Course Title: Honors Biology

Course Pre-Requisites: Refer To Registration Presentation

Course Description: Topics addressed in this course may include, but are not limited to the Nature of Science, Structure and Function of Cells, DNA, RNA and Protein Synthesis, Mitosis and Meiosis, Genetics, Evolution and Ecology. Students will participate in laboratory exercises, small group activities and class discussions. Students should expect a fast pace and high rigor if enrolling in this class. Students should expect to use higher-order thinking skills to understand the course content conceptually. Students must be open to listening compassionately to the opinions of all others and be willing to learn from their classmates as well as the teacher. Students will be expected to utilize all of the following higher-level thinking skills at one time or another during the activities throughout this course: argue, assess, choose, compare, conclude, contrast, defend, describe, discriminate, estimate, evaluate, explain, justify, interpret, relate, predict, select, summarize, support, assemble, categorize, collect, construct, create, design, develop, formulate, generate, plan, prepare, reconstruct, relate, revise, write, tell, analyze, calculate, criticize, diagram, differentiate, examine, experiment, identify, illustrate, infer, model, outline, and question. Students will be expected to create and interpret graphs and diagrams. Student must be self-motivated and able to work independently with much productivity. Student will be expected to collaborate with peers to problem-solve and to develop creative pieces of work. Student will be expected to be part of a scholarly dialogue and to be an active member of the class.

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

- Basic knowledge of chemistry (atoms), cells (organelles and their functions), photosynthesis and respiration (the purpose and the basic equation), and DNA (structure and function)

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

- High reading comprehension skills
- Although homework is 15-30 minutes a night the course requires intense study skills that may be time consuming.
- There are multiple labs which require analytical and application skills
- Exams focus on a deep understanding of the material which will test the students ability to conceptualize and apply knowledge.