

ROSLYN HIGH SCHOOL

DEPARTMENT : SCIENCE

NAME OF COURSE: ADVANCED PLACEMENT BIOLOGY

Prerequisite:

Students who take this course must have a 90 average or better in ALL honors level science and math courses. Students that do not meet these criteria are rarely successful in this course. Students should have strong mathematical skills and a very high level of reading comprehension. This course focuses on the deep understanding and application of complex biological principles. While a good memory will be helpful, this course does NOT focus on memorization.

Course Description:

Advanced Placement Biology is an academically rigorous course that surveys all topics in biology. The major areas of study are broken into 4 big ideas:

- 1) The process of evolution drives the diversity and unity of life.
- 2) Biological systems utilize energy and molecular building blocks to grow, reproduce, and maintain homeostasis.
- 3) Living systems retrieve, transmit, and respond to information essential to life processes.
- 4) Biological systems interact, and these interactions possess complex properties.

Text:

Principles of Life, Hillis, Sadava, Heller and Price

Expectations:

This Advanced Placement Biology course is taught on the level of a first year college biology class. The students will use a regular college textbook and laboratory equipment. A cumulative exam, which is administered by the College Board, will be given in May. The grade on the exam is used by many colleges to grant advanced placement and/or college credit in biology. Students will also have the opportunity to earn 8 college credits from Adelphi University. More information on this will follow. To succeed in this course, students must be willing to work diligently. Homework, lab work and class discussions are all essential activities that students are expected to complete. Students will also be expected to review class notes daily. Class discussions and lectures will also be common. Current news in the area of biology (or science in general) will also be a large part of the course.

GRADING PROCEDURES

Tests will determine 45% of the grade, labs 25% of the grade, quizzes 20% of the grade and homework will determine the remaining 10% of the grade. There will be a cumulative midterm which counts for 20% of the second quarter grade. There will be a cumulative final exam which counts for 20% of the final grade for the course. Students are expected to take the AP exam administered in May.