

Molecular and Genomic Biology

2016-2017

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Science is the search for truth, that is the effort to understand the world: it involves the rejection of bias, of dogma, of revelation, but not the rejection of morality.

Linus Pauling

Course Philosophy

This course is designed to provide Cold Spring Harbor High School students the unparalleled opportunity to learn state-of-the-art biology at The DNA Learning Center (DNALC). The DNALC is the world's first science center devoted entirely to genomics education and is an operating unit of Cold Spring Harbor Laboratory, a world-renowned center for cancer, genomics, neuroscience, plant biology and quantitative biology research.

The class meets 8th and 9th periods every school day. The class will either go by bus to the DNALC or meet at CSH HS. On days that we go to the DNALC, the bus will leave school at 1:00 pm and return to school before the end of 9th period. The bus is usually in the student parking lot near Cafeteria B. It is vital that you get to the bus promptly. Under no circumstances are you allowed to drive to the DNALC. On days that we stay at CSH HS, we will meet in either S-11 or one of the computer labs.

How your quarterly grade will be determined

Tests

Tests are given at the end of each major unit. Tests will always be announced. If you miss a test you must take the make-up test on make-up date will be determined upon your return to school. Missed tests due to an illegal absence (i.e.: cutting class) will result in a zero.

Quizzes

Quizzes can be announced or unannounced. There are no make-up quizzes. Missed quizzes due to an illegal absence (i.e.: cutting class) will result in a zero.

Unannounced quizzes in this course are open notebook. However, you are limited to using your own notebook and handouts. **Sharing of material is not permitted.**

Homework

Homework is important! Some homework will be collected and graded while other homework will be checked in class. Make sure you always complete your homework. Late homework is **not** accepted and will count as a grade of zero. You are responsible for all assignments.

Presentations

On several occasions you will make individual or group presentations to the class. The presentations will usually, but not exclusively, be based upon your reading of journal articles.

Laboratory Work

Bench work is a major component of this course. You are required to keep a lab notebook that chronicles your work.

Research

A significant portion of time will be devoted to research. Each unit will begin with lessons and guided lab activities. Following the portion of the unit you will design and conduct your own experiment.

Quarterly Grade Calculation

Your quarterly grade will be determined by the fraction:

$$\frac{\Sigma \text{ Earned Points}}{\Sigma \text{ Possible Points}} \times 100$$

Keep track of your grades and save all papers that are returned to you.

Extra Help

Extra help is available by appointment. As soon as you are feeling unsure about the material make certain you see me. The material you don't understand one day is sure to come back and haunt you later.