

Honors Biology

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Course Description:

Students in this challenging upper level Biology course will learn the core concepts of biology and apply those concepts to actual in-class laboratories and experiments. In the first semester we will be covering biochemistry, cellular structure and function, cellular transport, cellular respiration, cellular reproduction the fundamentals of genetics, and DNA, RNA protein synthesis, and Evolutionary theory. The second semester we will delve into animal classification, plant diversity and physiology, introduction to Ecology, and Human Reproduction. In addition to material provided in the textbook we will discuss scientific papers and recent discoveries in Biology.

We will have approximately eight laboratory exercises this year, they will all have reports of varying involvement (see below).

Students are responsible for lecture notes and material found in the text book (Modern Biology: Holt, Rinehart and Winston).

Points:

- *Chapter Questions* (10pt): Homework assignments will be typed in complete sentences and must consist of not only the question, but a complete answer.
- *Chapter Tests* (100pt): Tests are comprised of multiple choice, fill in the blank questions and two essay questions. Essays must include an introduction and answer the question completely.
- *Chapter Essay Questions* (20pt): Essay Questions will be assigned for select chapters. Students must provide a single typed page consisting of an introductory paragraph, a body and a conclusion paragraph. Students will provide a digital copy and a printed copy.
- *Laboratories* (10-50pt): Laboratory reports will vary in complexity we will have at least two large lab reports due this year. Specific instructions will be provided during those labs
- *Midterm and Final Exam* (as per student handbook) These two yearly exams will be cumulative for each semester.
- *Extracurricular Science Activity* (100pt): Students in the honors program are required to complete *one* (1) extra curricular activity for the year. Students can volunteer for the Coastal Cleanup, or Cleanup America Programs, other opportunities will be available through the year. It is up to the student to discuss an appropriate project with the instructor prior to a grade being awarded. Failure to complete this project will result in a grade of 0. This grade will be assigned in the fourth quarter even if completed during the first semester.

Grading System: Please refer to the Student Handbook.

Grading Procedure: The final grades will be determined by dividing the total number of points by the total number available. This will be displayed as a percentage of the total points earned; letter grades will be assigned according to the percent range in the Student Handbook.

Make-Up Work: Any student with an excused absence (as per the Student Handbook) will be allowed to turn in assignments without a late penalty as long as the assignment is turned in equal to the number of school days absent (e.g. absent on Thursday and Friday the assignment will be due at the end of school (3:05pm) on Tuesday the following week). Late work will not be accepted without an authorized excused absence. Due to the in-depth and group nature of the Laboratories students may not make up the missed work. In the place of the lab a paper may be assigned at the discretion of the instructor. Any tests missed will be re-taken as soon as possible after school, the test will be over the same content.

Late Work: As per the Student handbook late homework will not be accepted. In the unfortunate event that an lab assignment or paper is not turned in during class 30% of the possible grade is deducted for the first day, 20% the following day and 10% each following day. Make up work will not be accepted five (5) days after the assignment is due.

Class Materials: Writing utensils, notepad, calculator, and designated folder for keeping handouts organized.

Specific Rules: The instructor **will not** accept any paper or homework that is electronically mailed (unless discussed with the instructor). I **will not** excuse you to leave the room for a snack, if you are planning on eating during snack time, plan ahead and get a snack in the morning. Use the facilities prior to class do not interrupt your fellow students unless there is a medical emergency.

After Class Assistance: I will be available prior to the start of the class day from 7:30 to 7:50 and following class 3:05 to 3:30. All makeup testing will take place at this time. Please see me prior to make arrangements for consultation after normal class hours.

Important Class Notes: Each Friday students will be assigned reading material to be completed by that Monday. Due to the nature of the material covered some weeks will have heavier reading loads than other weeks. The tests will be taken from the vocabulary in each section, lecture material, as well as the questions at the end of the section. It is *imperative* that you not only understand the concepts but the context of the vocabulary words. I will present material in the lecture that is not directly covered in the Biology textbook, therefore it is crucial that you take notes in class and have the reading done for that week.