

HONORS BIOLOGY

COURSE DESCRIPTION: Honors Biology is an advanced investigative laboratory course examining the structural and physiological characteristics of life from the molecular to the organismal level. Further emphasis will focus on analyzing and constructing patterns of biological interactions within ecosystems based upon selective pressures of speciation. Students will be using critical thinking skills to formulate arguments based on scientific data to explain natural phenomenon and design solutions to current global problems.

TEXT: Biology by McDougal and Littell, Copyright © 2008. Additional resources can be found on my Canvas Page and website (<http://sctritonscience.com/Wilson/home/>)

COURSE OUTLINE: BIOLOGY:

First Semester

UNIT 1: Biochemistry
UNIT 2: Cell Structure and Function
UNIT 3: Cell Energy
UNIT 4: DNA Structure/Cell Division
UNIT 5: Protein Synthesis

Second Semester

UNIT 6: Genetics
UNIT 7: Genetic Engineering
UNIT 8: Evolution
UNIT 9: Ecology
UNIT 10: Human Physiology

TEACHING METHODS: This course will be taught with a heavy emphasis on laboratory investigations. Lectures will cover the main concepts in the chapters. Labs will reinforce those concepts. Students will be required to take notes from the lectures or labs. Quizzes will be given periodically to help students keep up and check for understanding the material. Unit tests will cover both lectures and lab material. They will vary in length from 50-100 questions, including multiple choice, matching, fill-in, essay, and diagrams, and occasional lab practicums. Critical thinking skills and hands-on investigative skills will be emphasized in the labs. Students will often work with partners or groups to develop cooperative learning skills. Chromebook computers will be used daily in this course, and you will be required to bring yours with you every day. Students who miss lectures or homework assignments can also access these from home from my Canvas Page.

GRADING: Your grade in this class will be determined from the following, using a POINT SYSTEM. 90-100% A; 80-89% B; 70-79% C; 60-69% D; <60% F. Grades will be posted in class and School Loop (<http://sctritons.schoolloop.com/>)

Grades are broken down as follows:

- ▶ Tests / Quizzes = 45%
- ▶ Labs / Classwork = 25%
- ▶ Homework = 15%
- ▶ Final Exam = 15%

LABS: Lab work is a very important part of this course. You will be expected to conduct yourself in a proper manner during all lab work. **Anyone who is careless during labs will be removed from the class.**

- ▶ Students who miss a formal lab must make up the lab by doing an alternative assignment (see teacher)

MOVIES: Throughout the course of the year, one or more of the following movies may be shown to the class. All are rated PG-13: "Avatar", "GATTACA", "The Day After Tomorrow", "Gravity", "The Martian".

HOMEWORK ASSIGNMENTS: Homework will be turned in on the due date to receive credit. **No late homework will be accepted!** Homework will include: reading assigned text, writing lab reports, finishing labs or class assignments, occasional outside research and projects and studying for quizzes and tests. Assignments are due at the beginning of the period to receive credit. Do not copy homework. If caught, both persons receive a zero on the assignment.

- ▶ Students with excused absences will be required to turn in class work / homework within **two days** after students return to school.
- ▶ Students must take announced tests the day they return unless they missed new material on test.
- ▶ Missed tests must be made up within **one week** of original test date or student will not be able to make up the test and will receive a zero. (Make-up tests can be taken in Tutorial or prearranged at lunch)

TARDIES AND ABSENCES: When the bell rings, class begins. Any work missed because you are tardy will not be allowed to be made up. **Be prepared when the bell rings to begin class**– make sure you have all required materials (notebooks, pens, pencils, paper, etc.) If you are absent, you will always miss something important. **It is your responsibility** to ask me what you missed and make up work as quickly as possible. Notes can be copied or xeroxed from another student. Labs are more difficult to make up and special arrangements will have to be made. Tests must be made up **within one week** during your free period, before or after school, during tutorial, or during class. **TARDIES:** The first **TWO** are free. Note sent home after 3, 4 and above = detention. 5th or more = parent conference and assignment of Friday or Saturday School.

* **NOTEBOOKS:** It is recommended that a well-organized notebook be maintained for the length of this course. All work should be kept in the correct section and in chronological order. Notebooks should be brought to class daily. You should have the following sections in your notebooks:

1. Notes
2. Worksheets
3. Labs
4. Homework
5. Tests and quizzes

CLASS RULES: Failure to adhere to classroom rules will result in loss of participation points as well as possible assignment of detentions and/or Saturday School.

1. **Be respectful at all times** – To fellow students, the teacher, and your classroom
2. **Be prepared for class** - paper, pens, notebook, and **homework completed**.
3. **Do not leave your seat** without permission.
4. **No food, gum, or drinks allowed in class** (bottled water is the exception)
5. **Copying homework is unacceptable**.
6. **No Cell Phones** will be in use during class without teacher permission. (They will be confiscated)
7. **Follow safety procedures** at all times. No screwing around!
8. **Do not mess with classroom computers** (do not change settings or download programs)

HOW TO SUCCEED IN THIS CLASS:

1. Don't let yourself fall behind in your studies. **Study each night** for as long as it takes you to understand the assigned material. Remember, PowerPoint Lectures as well as most worksheets, labs, etc., are available for you to review and download at: <http://sctritonscience.com/Wilson/home/>
2. Do all assigned reading and written homework.
3. **Be organized.** Take good notes and work neatly and carefully during all labs and activities.
4. Absences are **no** excuse for not knowing the material. If you are absent it is **your responsibility** to find out what you have missed and schedule a time to make it up!
5. **LISTEN.** And if you don't understand something, **ask me to explain it.**
6. Come and get extra help if you need it. I am usually available before and after school. Check with me. Please! You can email me at dbwilson@capousd.org

** Please note that the Constitution of the State of California requires that we provide a public education to you free of charge. Your right to a free education is for all school/educational activities, whether curricular or extracurricular, and whether you get a grade for the activity or class. Subject to certain exceptions, your right to a free public education means that we cannot require you or your family to purchase materials, supplies, equipment or uniforms for any school activity, nor can we require you or your family to pay security deposits for access, participation, materials, or equipment.*